NOTIFICATION TO AN AFFECTED PARTY OF A PROPOSED ACTIVITY UNDER ARTICLE 3 OF THE CONVENTION

Environmental Impact Assessment

1. INFORMATION ON THE PROPOSED ACTIVITY	
(i) Information on the nature of the proposed activity	
Type of the activity proposed	Upgrade of the navigation lock at the HPP Đerdap 2
Is the proposed activity listed in Appendix I to the Convention?	No
Scope of proposed activity (e.g. main activity and any/all peripheral activities requiring assessment)	Architectural and construction works on repair of identified damages on facilities, as well as dismantling of the existing and procurement, installation, testing and commissioning of new electromechanical equipemnt
Scale of proposed activity (e.g. size, production capacity, etc.)	Proposed activity includes following architectural and construction works: • Reconstruction and modernization of the control tower - replacement of existing materials that have been used to finish the interior of the nacelle of the control tower (walls, ceilings and floors) and the exterior finish of the nacelle and the supporting reinforced concrete core; • Reconstruction and modernization of technological premises - replacement of existing materials that have been used to finish the internal space of the technological premises (walls, ceilings and floors) and external treatment of the entrance annexes to the technological premises; • Rehabilitation of the construction of the control tower gondola • Rehabilitation of the construction of technological premises • Repair of damage to concrete surfaces of the lock chamber • Rehabilitation of the embankment in the downstream berthing area which includes rehabilitation of the upstream spitz of the embankment on the river side of the downstream pre-port and rehabilitation of the part of the river slope of the embankment. The designed solution envisages that the crown of the embankment of the downstream pre-port will be brought to the elevation of 40 m above sea level. It was proposed that works on shaping the skittles be performed on the upstream peak of the embankment. • Reconstruction of existing internal roads on both sides, along the lock chamber. Replacment of electrical instalations includes: - replacement of the existing 6.3 kV voltage cells - replacement of the existing 0.4 kV voltage line - replacement of the existing diesel generator with a new one - formation of uninterruptible power supply system - replacement of DC voltage distribution equipment, and all cable connections - Introduction of a modern management system - Replacement of equipment with new ones on the traffic light signaling system; heating, ventilation and air conditioning system; external and internal lighting system; stable fire extinguishing system; cranes; discharge and drainage system (pumping stations); door heating system; central lubrication system for working double doors.

	Replacement of mechanical instalations includes: - replacement of the complete existing equipment for the hydraulic drive installation of doors and shutters on the upper and lower head of the navigation lock with a new one - replacement of the complete existing equipment of the hydraulic drive installation of the protection for ships braking, - examination of the condition and repair of the determined damage of the main working door with the replacement of wearing parts - the replacement of the existing mechanical equipment for heating and ventilation of the operating spaces on the upper and lower head and gallery spaces at elevations of + 37.50 and + 30.30 m, as well as air conditioning equipment in the rooms of the navigation control tower - installation of a new modern electric boiler with electronic control of heater operation, power 70 kV - Replacement of the existing crane equipment - Replacement of the existing equipment in pumping stations for lock chamber emptying and drainage of leaked water.
Description of proposed activity (e.g. technology used)	Reconstruction and modernization of the control tower and of technological premises shall be performed in accordance with the standards in the Republic of Serbia (SRPS standards) for the type of work that are in line with European and internationaal standards and if there is no appropriate SRPS standard for certain works, products and materials, an international, some national standard will be applied. Rehabilitation of the construction of the control tower gondola - For damage to the concrete pillar and the roof plate of the gondola of the control tower, manual repair of the concrete is envisaged. Rehabilitation of the construction of technological premises - during the reconstruction of the technological premises it is necessary to perform the following: 1. all necessary repairs of concrete in order to prevent leakage and wetting on the walls and ceilings of rooms and galleries by injecting cracks 2. removal of existing equipment stands and their adaptation in accordance with the requirements of the new equipment and the proposal of the equipment manufacturer Repair of damage to concrete surfaces of the lock chamber The project envisages works for the repair of identified damage to constructions: - Repair of damage to the concrete surfaces of the pillars and the quay wall of the upstream pre-port, damage to the concrete surfaces of the chamber and head of the lock, as well as damage to the concrete surfaces of the quay wall of the downstream pre-port by manual concrete reapir. - Repair of cracks in concrete surfaces in the chamber and in the zones of the head of the lock, concrete surfaces of the quay wall of the upstream pre-port by injecting cracks. - A crystallization method is envisaged for additional protection against water permeability after repairing concrete damage - on the inner walls of the chamber and in the areas of the ship's lock heads The best solution for *manual concrete reapir* is cement mortar because the characteristics of the repaired parts will correspond to the characteristics of the original material. Cement mortar should be specifically suitable. The following works shalld to be performed: • Surface preparation (cleaning, sandblasting or applying high pressure jets) • Removing the damaged

	layer of concrete if any • Possible reinforcement cleaning and repair if necessary • Mortar application on a healthy surface • Filling all holes in the concrete at the places of formwork anchoring • Concrete surface care. The best solution for *injecting cracks is* to use a polyurethane-based injection material. This will allow some flexibility if there is additional movement of the structure. In most cases, additional grouting is required during the life of the concrete structure. This should be accepted as normal maintenance of the structure. Regarding the execution of works, the following can be mentioned: • Applying mortar to the area around the cracks, • Drilling holls and installing packers in a zig-zag arrangement around cracks, • Application of injection mass by injection into cracks *Crystalllization* - The application of the material shall be in accordance with the manufacturer's manuals. Regarding the execution of works, the following can be mentioned: • Surface preparation (high pressure cleaning), • Application of crystallization agent, • Concrete surface care. <u>Reconstruction of existing internal roads on both sides, along the lock chamber</u> For the reconstruction of the subject traffic areas, it is necessary to remove all existing layers of asphalt to the reinforced concrete slab or the supporting layer of asphalt, and then clean and spray the concrete base with emulsion. A polyester fiber geocomposite is placed over the prepared surface. New asphalt will be construct as a final layer of AB 11 in a thickness of 5 cm. <u>Rehabilitation of the embankment in the downstream berthing area</u> The newly designed solution envisages that the crown of the embankment of the downstream pre-port will be brought to the elevation of 40 m above sea level. The slopes of the embankment are 1: 2.5. The body of the embankment will be formed of sandy-gravel material. The leveling of the embankment crown by filling will be done up to the level of 39.5 m above sea level. The crown of the embankment will be covered with a layer of gravel 0.5 m thick, with granulation of gravel Ø 31.5 - 63 mm. The lining of the stone is placed on the upstream peak of the embankment and continues in the downstream direction on both sides of the embankment. On the coastal side of the embankment slope, the stone embankment is placed at a length of 39 m, and on the river side the embankment slope of the stone embankment is placed at a length of 157 m.
Description of purpose of proposed activity	The ship's lock has been in operation since February 1994. During the first installation, the entire equipment of the ship's lock was produced in Romania, whose concept is outdated, but due to regular maintenance, there were no major accidents. Adaptation of equipment, devices and systems needs to be done due to the obsolescence of the equipment, as well as due to the necessary strengthening of the equipment on the deceleration front due to the increased elevation of the upstream lake. Reconstruction, rehabilitation and adaptation of the Serbian ship lock should improve the reliability and efficiency of river traffic on the important Pan-European Corridor VII, which is a vital link between Western Europe and the countries of Central and Eastern Europe.

Rationale for proposed activity (e.g. socio-economic, physical geographic basis)	/
Additional information / comments	

(ii) Information on the spatial and temporal boundaries of the proposed activity

Location	Hydropower and navigation system "Djerdap 2" (Porțile de Fier II) belongs to the Bor district, ie the Municipality of Negotin. It was built at the stationing of km 862 + 800 on the profile "Kusjak", ie at 44 °17'46.0 "north latitude and 22 °33'25.0" east longitude. The location is 2 km upstream from the beginning of the Ostrovu Mare, which divides the Danube into the main course and the left armlet Gogos. On the Gogos armlet, about 11.5 km upstream, is the second barrier point of the Hydropower and Navigation System "Đerdap 2" - the Romanian Gogos dam. HPNS "Đerdap 2" is located 80 km downstream from HPNS "Đerdap 1", 70 km from Kladovo, 67 km from the Romanian town of Turn Severin and upstream 2 km from Prahovo and 17 km from the mouth of Timok. Access to HPP "Đerdap 2" is possible by the state road IIA row number 168 - connection with the state road 35- Dušanovac - state border with Romania (border crossing).
Description of the location (e.g. physical-geographic, socio-economic characteristics)	**Population and settlements:** HPNS "Đerdap 2" is mostly located in the settlement of Dušanovac, while a smaller part belongs to Prahovo and Mihajlovac. According to the 2011 Census, the number of inhabitants in Dušanovac is 782, in Prahovo 1196, while in the municipality of Negotin live 32007 people. In the settlement of Prahovo, in addition to the facilities for individual housing, there is also the chemical products industry "Elixir Prahovo" and the international port of Prahovo. **Immovable cultural property and archaeological sites.** According to the Decision on the determination of immovable cultural goods of exceptional and great importance ("Official Gazette of the SRS" No. 47/87), there are no protected immovable cultural g.oods in this area. **Protected areas.** There are no protected plant and animal species in the immediate vicinity of HPNS Djerdap 2. Protected areas located in the municipality of Negotin are 11-20 km away from Djerdap 2. **Quality of land, water and air.** Anthropogenic soil pollution in the vicinity of HPP Đerdap 2 originates from the chemical industry (by sedimentation of emitted powdery substances, dispersal of pyrite combustion from the landfill in Prahovo and leakage of atmospheric water from the phosphogypsum landfill). The results of the assessment of soil quality in the area of Negotin, performed in 2005, showed that the limit values of nickel were exceeded in most of the samples. Copper concentrations were increased in three samples and cadmium in one. Monitoring of the Danube River quality is performed at a total of nine stations, of which the closest are Brza Palanka (21 kilometers upstream) and Radujevac (10 kilometers downstream). At both measuring stations, monthly monitoring of general parameters, oxygen regime, nutrients, salinity, metals, microbiological parameters and priority and priority hazardous substances is performed. The results of the quality of the Danube River for the last three processed years (2016, 2017 and 2018) show that deviations from category I and II were recorded in the case of nutrients (nitrogen and phosphorus compounds), total iron and microbiological parameters. Also, the presence of dissolved nickel and fluoroeranthenes in concentrations corresponding to categories III / IV was determined. The territory of the municipality of Negotin is not covered by the state network of automatic air quality monitoring. Air monitoring is performed twice a year, during summer and winter. Results shows that the measured values were within the limit or slightly deviated from them. **Climate.** The lower Danube basin, to which the subject area belongs, is characterized by a pronounced continental climate. The average annual temperature in Negotin is 12.4 ° C, the warmest months are July (24.1 °C) and August (23.6 °C), and the coldest are January (0.4 °C) and December (1.3 °C). The highest precipitation is in December (65.3 mm), June (61.7 mm) and May (60.7 mm), ie 633.7 mm annually. Djerdap are has frequent winds, with average speeds of over 1.5 m/s throughout the year, and the west-northwest wind has the highest

	frequency. **Landscape.** Apart from the built road number 168, the bank of the Danube in the immediate vicinity of HPP "Derdap 2" is undeveloped, covered with grass and low vegetation.
Rationale for location of proposed activity (e.g. socio-economic, physical-geographic basis)	/
Time frame for proposed activity (e.g. start and duration of the construction and operation)	Construction works: 1.9.2021-28.4.2022. Trial operation: 17.8.2022-16.11.2022.
Maps and other pictorial documents with the information on the proposed activity	 Microlocation of Djerdap 2
Additional information/comments	/

(iii) Information on the expected environmental impacts and proposed mitigation measures

Scope of assessment (e.g. consideration of cumulative impacts, avaluation of alternatives, sustainable development issues, impact of peripheral activities, etc.)	The activity is already existing. Rehabilitation, adaptation and reconstruction of the ship's lock will not lead to negative long-term impacts on the environment. The execution of works will not change the mode of operation and the capacity of the substation, so that the impacts of the substation operation on the environment remain the same as the existing one. Execution of works will improve the safety of the ship's lock.

Expected environmental impacts of the proposed activity (e.g. types, locations, magnitudes)	In the phase of construction works on the adaptation of the ship's lock, mechanization and means of transport will be engaged. It is to be expected that during the operation of these machines, exhaust gases will be emitted into the air, as well as an increased noise level. **Air emissions** During the construction works on the rehabilitation, adaptation and reconstruction of the ship's lock, the following air emissions will occur: – dust emission during stone embankment and installation of a gravel curtain on the embankment crown in the downstream pre-port, – dust emission during works on repair of concrete structures, – emission of vapors from volatile organic compounds contained in anti-corrosion protection agents – exhaust emissions (CO2, NOx, SO2, soot, incomplete combustion products: carbon monoxide CO, unburned hydrocarbons, aldehydes, semi-aromatic hydrocarbons, inorganic components such as heavy metals, unpleasant odors). **Impact on Danube river quality** Potential negative impact on the water quality in the Danube and the translation chamber may occure due to: – using special high-quality concrete, penetrating crystallization material and modern materials based on polyurethane, – leakage of waste hazardous materials (machine oil, fuel) from navigable construction machinery, – evacuation of municipal waste and wastewater from vessels performing works on revitalization of building structures (fecal, ballast and bilge water), – embankment of crushed stone in the downstream pre-port during the formation of rip-rap protection, – atmospheric waters that are collected from concrete and asphalt surfaces loaded with oil and fuel from mechanization. **Waste** During construction work, the following types of waste will be generated: construction and demolition waste, waste from downstream embankment cleaning, discarded electrical and electronic equipment, waste asphalt, greased equipment, etc. **Noise** Noise emissions will occur during construction and ground works and the source of noise will be construction machinery and means of transport. The noise will have the greatest negative effects on the construction site of the ship's lock and in its immediate vicinity, and it is of a temporary nature.
Inputs (e.g. raw material, power sources, etc.)	Water, concrete, electrical power
Outputs (e.g. amounts and types of: emissions into atmosphere, discharges into the water system, solid waste)	
Transboundary impacts (e.g. types, locations, magnitudes)	Potential negative impacts on the environment are temporally and spatially limited to the ship's lock, so a transboundary impact is not expected.
Proposed mitigation measures (e.g. if known, mitigation measures to prevent, eliminate, minimize, compensate for environmental effects)	The investor is obliged to meet the requirements prescribed by laws and bylaws governing environmental protection. **Air protection measures:** – Proper selection of construction machines and vehicles for the procurement of modern devices with the lowest emission of exhaust gases; – Controlling the correctness of the engine and mechanization, in order to eliminate excessive exhaust emissions.

- Cleaning of access roads near the location (removal of soil and sand) in order to reduce the formation of dust.

Surface water and sediment quality protection measures:

- Controlled use of the most environmentally friendly coatings and final paints for protection of metal surfaces from corrosion according to the requirements of the manufacturers of these materials and technical conditions for execution;
- Controlled cleaning of metal surfaces and transportation of generated waste to the appropriate landfill;
- Use of the most environmentally friendly anti-corrosion agents;
- Proper selection of machinery and equipment in order to prevent leakage of oil and oil derivatives and their entry into water;
- Collection and treatment of sanitary, ballast and bilge wastewater from vessels engaged in the rehabilitation of concrete surfaces of the lock;
- Monitoring and maintenance of vessels and their engines, in order to eliminate the possibility of oil and fuel from the vessel entering surface waters;
- Removal of waste generated during the cleaning of surfaces of metal structures and concrete parts from paint and corrosion residues, as well as during sandblasting of metal surfaces and temporary storage of waste until delivery to an authorized operator for its disposal.

Land quality protection measures:

- Regular maintenance and control of the correctness of engines and construction machines, in order to prevent the entry of oil, derivatives and machine oil into the soil;
- Carrying out the remediation of contaminated soil (biochemical, electrochemical or some other decomposition reaction of the present pollutants) in drastic cases of accidental damage and scattering of significant quantities of hazardous waste, which originate from oil and oil derivatives;
- Storage of oil and oil derivatives in vessels equipped with secondary receptacles whose volume corresponds to the stored volume of oil and oil derivatives;
- Transshipment and storage of petroleum products: fuels, oils and lubricants, as well as servicing of construction machinery and vehicles exclusively on concrete watertight surfaces, which have a controlled drainage system for evacuation of waste and wastewater with an oil separator;
- All chemicals that will be used for the needs of rehabilitation and adaptation of the ship's lock must be adequately stored;
- Transportation of petroleum products and hydraulic oil by certified means of transport with the provision of constant sanitary supervision during the transport and use of these materials;
- Temporary disposal of waste mechanical and electrical equipment on a concrete base with a canopy in order to prevent oil leakage from discarded equipment into the underground environment;
- Waste management in accordance with legal regulations, ie. in a way to prevent soil and groundwater pollution;
- Provision of a sufficient number of special, mobile containers, according to the number of permanent and temporary workers for the collection of solid municipal waste from the site of works.

Waste management measures:

- Materials during demolition or dismantling will be classified by types and dimensions, cleaned and stored in a temporary landfill within the construction site.
- Collection, sorting, packaging and temporary storage of generated waste will be performed;
- A sufficient number of marked dedicated containers will be provided for the collection and temporary disposal of municipal solid waste, as well as containers,

	tanks and barrels for various types of solid and liquid waste generated during the reconstruction of the lock; – Solid municipal and construction waste will be collected exclusively in dedicated containers, and the discharge will be entrusted to the competent PUC; – Recyclable waste (metal, wood, glass, plastic) must be collected separately and properly disposed of until handed over to a person authorized or licensed to manage these types of waste; – Generated solid potentially hazardous waste (oiled equipment, contaminated soil, used sorbent for oil substances, sand, paint and metal residues after sandblasting, packaging of paint and protective agents, sludge from separators, etc.) and collect it in appropriate containers and execute waste characterization; – Dispose of liquid hazardous waste (oily water, hydraulic fluid, used motor and transformer oils, as well as lubricants, etc.) in tanks and certified, marked metal barrels and perform characterization; – Further procedure with solid and liquid hazardous waste should be harmonized with the results of waste characterization, and takeover and final disposal should be entrusted to an authorized legal entity; – Manipulative surfaces and surfaces on which containers, tanks and barrels for temporary disposal of collected waste will be located should be made of waterproof materials resistant to oil and oil derivatives and equipped with a drainage system for evacuation of waste and wastewater, with oil separator. **Noise measurements:** – The noise level must not be higher than the permitted limit prescribed by the Regulation on Noise Indicators, Limit Values, Methods for Assessing Noise Indicators, Disturbance and Harmful Effects of Noise in the Environment ("Official Gazette of RS", No. 75/2010); – Prohibition of construction activities during the night; – Identification of endangered places in the immediate vicinity of the construction site and use of adequate equipment; – Proper selection of construction machines and vehicles in order to procure modern devices with the lowest noise emission and the least vibration during operation; – Regular maintenance of machinery in good condition, in order to minimize noise and vibration.
Additional information/comments	/
(iv)	
Name, address, telephone and fax numbers	Ministry of construction, transport and infrastructure Republic of Serbia, 11000 Beograd, 22-26 Nemanjina st.
(v)	
Is the EIA documentation (e.g. EIA report or EIS) included in the documentation?	No
If no/partial, description of additional documentation to be forwarded and (approximate) date(s) when documentation	Development of Request for Establishing the Scope and Contents of the Impact Assessment Study is ongoing.

will be available	
Additional information/comments	

2.

(i)

Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix) - Name, address, telephone and fax numbers	Ministry of construction, transport and infrastructure Republic of Serbia, 11000 Beograd, 22-26 Nemanjina st. Contact person: Veljko Kovacevic Tel: +381 11 361 9491 GSM: +381 61 720 2424 E-mail: veljko.kovacevic@mgsi.gov.rs
List of affected Parties to which notification is being sent	Romania

(ii)

Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix) - Name, address, telephone and fax numbers	
Decision-making authority if different than authority responsible for coordinating activities relating to the EIA - Name, address, telephone and fax numbers	Republic of Serbia Ministry of Environment Protection of the Republic of Serbia Environmental Impact Assessment Department 1 Omladinskih brigada St. 11070 Novi Beograd

3.

(i) Information on the EIA process that will be applied to the proposed activity

Time schedule	
Opportunities for the affected Party or Parties to be involved in the EIA process	Affected Party and Parties are involved in EIA process in accordance with Law on Environmental Impact Assessment.
Opportunities for the affected Party or Parties to review and comment on the notification and the EIA documentation	According to the Law on Environmental Impact Assessment, intrested bodies and organization and interested public may submit their submit their opinions within: - 15 days on the Request for Establishing the Scope and Contents and - 20 days on the Environmental Impact Assessment Study starting on the date of receiving and publishing on the website of Ministy.
Nature and timing of possible decision	

Process for approval of the proposed activity	
Additional information/comments	
4. INFORMATION ON THE PUBLIC PARTICIPATION PROCESS IN THE COUNTRY OF ORIGIN	
Public participation procedures	Under the Environmental Impact Assessment Law (Official Gazette RS, No. 135/04, 36/09), all stakeholders (authorities, organizations and the public) may review and provide their opinion during the entire environmental impact assessment procedure, from the time of application for determining the scope and contents of the EIA Study until its approval by the ministry in charge for environmental protection.
Expected start and duration of public consultation	Expected start of public consultation is March 2021.
Additional information/comments	/
5. DEADLINE FOR RESPONSE	
Date	30 days after receiving the notification by the affected party