

NOTIFICATION TO AN AFFECTED PARTY OF THE PROJECT

Increasing the attenuation capacity of the Călinești accumulation and the transit of flashfloods to the border with the Republic of Hungary, Satu Mare County

1. INFORMATION ON THE PROPOSED ACTIVITY	
(i) Information on the nature of the proposed activity	
Type of activity proposed:	Flood management works
Is the proposed activity listed in Appendix I to the Convention?	No. The proposed project is included in annex 2 at points 10 letter f, letter g and point 13, letter a, of Romanian Law no. 292/2018, which transposes the EIA Directive. At the same time, the proposed project falls under Article 48 of the Water Law no.107 of 1996, point a, point d, point h and point k.
Scope of proposed activity (e.g. main activity and any/all peripheral activities requiring assessment)	In order to ensure the flood protection of the population located on the river Tur and its tributaries, Turt and Talna; the proposed works were designed at a flow rate exceeding 0.5% for urban areas with medium development and 1% for rural areas. In relation to the provisions of the Directive on the Evaluation and Management of Flood Risk (2007/60 / EC), it has been established for the components of the project a high degree of prioritization. In order to reduce/eliminate the flood risk, the following measures have been proposed: <ul style="list-style-type: none"> - EC code (M31)/code RO_M04-1 - creation of new wetlands; - EC code (M31)/RO_M04-2 - reconnection and restoration of floodplains; - EC code (M31)/RO_M04-4 - renaturation of the riverbanks (vegetative protection); - EC code (M33)/RO_M08-3 - increase of the transit capacity of the stream bed through local works of unclogging and re-profiling of the riverbed; - EC code (M33)/RO_M08-4 – elevation of the existing of levees; - EC code (M35)/RO_M10-1 - increasing the degree of safety of existing hydrotechnical constructions (rehabilitation: modernization, measures to limit infiltrations); - EC code (M35)/RO_M10-2 – carrying out maintenance works for the safe operation of existing hydrotechnical constructions and related equipment (maintenance and current repair work, upgrades, refurbishments, etc.); - EC code (M33)/RO_M11-3 - measures to stabilize the riverbed – white recalibrations, parapets, retaining walls, bank revetments, stabilization of the riverbed; - EC code (M35)/RO_M13-4 - maintenance of riverbeds and removal of bottlenecks, obstacles on watercourses; - EC code (M41)/RO_M17 – improvement of monitoring/forecasting and warning/alarm systems.
Scale of proposed activity (e.g. size, production capacity, etc.)	Once with the completion of works, no production activity is associated to the project. The completed works will serve for the improved flood management in the area of the project.

Description of proposed activity
(e.g. technology used):

The proposed project consists of the following works:

- **Rehabilitation and securing of the Călinești dam by:**
 - o Rehabilitation of hydromechanical equipment, outlet tower with controls and bottom outlet;
 - o Rehabilitation of electrical and power supply installations of hydromechanical equipment;
 - o Rehabilitation of the spillway;
 - o Upgrade and automation of the actuator system of the sluiceways and the cofferlevee;
 - o Improvement of the foundation drainage system (self-discharging boreholes);
 - o Rehabilitation of the upstream slope protection shield;
 - o Weighing down layer of downstream face of dam;
 - o Rehabilitation and reconsideration of the AMC system;
 - o To increase the degree of safety of the dam and to increase the attenuation capacity of the Călinești Accumulation by 3.0 mil. m³, a concrete parapet (breakwater beam) shall be erected with h=1.0 m throughout the length of the dam.
- **Achievement of non-permanent accumulation - Dimoșag polder with attenuated volume $W = 20.40$ mil. m³ at Q1% flow at = 160 m³/s;**
- **Rehabilitation and securing of the Hodoș and Tămășeni dam:**
 - o Rehabilitation and securing of the Hodoș dam;
 - o Rehabilitation and securing of the Tămășeni dam;
- **Ensuring the calculation heights and providing the defended premises by means of:**
 - o Levee resettlement – 9,250 m;
 - o Bringing up to the ground level of levees - 112,882 m;
 - o Sealing of existing levee foundation – 1,500 m;
 - o Levee underpassages with flap gates and sluiceway DN800 made of prefabricated reinforced concrete pipes DN800;
- **Protection of the banks of the stream bed on sectors with active erosion and the securing of the levees in the stream sectors with the very small levee-bank shoulder, by means of bank reinforcements the height of which observes the height of the existing banks:**
 - o Removal of obstacles from the riverbed;
 - o Vegetative reinforcement with geogrid by planting native seedling and sowing perennial plants;
 - o Prism from rip-rap with a height of 2.5 m - 12,135 m;
 - o Rehabilitation of the existing riprap consolidation with a height of 2.5 m - 1,700 m;
 - o Retaining walls of Cyclopean concrete on the Turț and Talna Rivers in the defined

	<p>urban area of Turț, Vama and Luna settlements in order to be able to ensure the calculation level (levees cannot be built because of the limited space) - 9,000 m;</p> <ul style="list-style-type: none"> ○ Rehabilitation of existing retaining walls – 115 m; ○ Layout of confluences with rip-rap - 3 pcs.; ○ Rehabilitation of the measurement section at the hydrometric plant. <p>– Stabilization of the thalweg at the required elevations and securing of bank reinforcements by means of:</p> <ul style="list-style-type: none"> ○ Concrete spillways with a height of 0.40 m - 5 pcs.; ○ Buried low weirs - 35 pcs.; <p>– The re-meandering and renaturation of the old meanders of Tur River:</p> <p>– Creating a wetland (flood cell) on the right bank of the Tur River in the area of Gherța Mică;</p> <p>– Resettlement of levees and restoration of floodplain in the following locations:</p> <ul style="list-style-type: none"> ○ The left bank of the Tur River upstream of the confluence with the Turț River; ○ 2 resettlements on the right bank of the Tur River in the area of confluence with Hodoș; ○ Right bank of Tur River upstream border; <p>– Equipment and fitting specific to the proposed function</p> <ul style="list-style-type: none"> ○ The hydromechanical equipment shall be replaced or rehabilitated; ○ Electrical and power supply installations of outdated hydromechanical equipment shall be replaced; ○ The actuator system of the outdated sluiceways and the cofferlevee shall be replaced.
Description of purpose of proposed activity:	In the context of flood risk management, through the interventions proposed by the project the following will be ensured: reducing the risk of flooding of buildings and social objectives within the settlements; restoration of the natural floodplain by giving more space to the river; stabilization of the river banks and the riverbed by applying structures with anti-erosion role and supporting the river bank; diminishing alluvial transport and reducing the likelihood of subsequent clogging of water courses; securing communication paths, existing bridges and utility networks; reducing the risks of pollution that can occur during floods; drainage of the flows from the precipitations caused on the urban surface of the localities; rehabilitation of the area adjacent to the river banks of the courses; protecting the water sources of the population.
Rationale for proposed activity (e.g. socio-economic, physical geographic basis)	The purpose of the proposed works is to ensure the protection against floods at a flow rate exceeding 0.5% for two urban areas with medium development and 1% for 13 rural communes.
Additional information/comments	
(ii) Information on the spatial and temporal boundaries of the proposed activity	
Location:	

<p>Description of the location (e.g. physical-geographic, socio-economic characteristics)</p>	<p>The project is located on the north-western part of Romania, on the territory belonging to 15 territorial units (13 communes and 2 towns) in Satu Mare County. Tur is a tributary of Tisa and its entire river basin falls in Satu Mare County. Tur springs from the Igniș Mountains and crosses the mountainous area with high slopes sometimes reaching 20‰, then the lowland of Oaş, with slopes around 2-8‰ and downstream of the confluence with the Rea Valley penetrates the Western Plain, where the slope of the river decreases to 0.1‰. This is where the riverbed becomes unstable, splitting into several bifurcations, to the confluence with Turț, from where it is impounded. It takes the Rea Valley on the right, Talna and Racșa on the left. The works of the proposed project are situated on the course of Tur, as well as Talna and Turt. The proposed location of the project is delimited to the west by the Oaş Country Depression, extending along the Tur course and its tributaries on the sector of the Livada Plain, a subdivision of the Someș Low Plain with altitude ranges between 101 and 150 m up to the western border. The land areas covered by the proposed works through the project are illustrated in the overall plan and the site plans of the project (Annexes no. 4 and no. 5 to the Presentation memoire).</p> <p>The area of Tur river downstream of Calinesti dam is a protected area. The area is a natural reserve (VII.10) Tur River, as well as a Special Protection Area for birds (ROSPA0068 Tur River) and a Site of Community Interest (ROSCI0214 Tur River). The area has a management plan approved by the GD no. 1177/2016.</p>
<p>Rationale for location of proposed activity (e.g. socio-economic, physical-geographic basis)</p>	<p>According to Flood Risk Management Plan – Somes-Tisa Water Basin Administration, approved through the GD no. 972/2016, the area covered by the proposed project is currently at significant risk of floods, therefore certain measures have been proposed in order to ensure the protection of the population.</p>
<p>Time-frame for proposed activity (e.g.: start and duration of construction and operation)</p>	<p>The construction works are expected to start in January 2021 for a period of 24 months. The works are designed for an operation period of 16 to 24 years in the case of the levees and up to 40 to 60 years in the case of the dam.</p>
<p>Maps and other pictorial documents connected with the information on the proposed activity</p>	<p>Annex to the Presentation Memoire (Annex 4, 5, and 6).</p>
<p>Additional information/comments</p>	
<p>(iii) Information on expected environmental impacts and proposed mitigation measures</p>	
<p>Scope of assessment (e.g. consideration of: cumulative impacts, evaluation of alternatives, sustainable development issues, impact of peripheral activities, etc.)</p>	<p>The potential impact on environment factors is associated with the stage of achieving the proposed investment and may be due, in most cases, to potential incidents or non-compliance with the impact prevention measures recommended. The proposed investments are not likely to produce a significant negative impact during the duration of their execution, neither the period of exploitation, as long as the proposed mitigation measures are enforced by the construction entrepreneur.</p> <p>The impact on environmental factors is characterized by reduced complexity, with reduced or moderate extension, with short-term and medium-term effects. The impact associated with the project is both direct and indirect, with a low or medium frequency, having a reversible character for almost all environmental components.</p>

<p>Expected environmental impacts of proposed activity (e.g. types, locations, magnitudes)</p>	<p>The potential effects of pollution on the environmental factors are those associated with the execution stage of the proposed investment and may be due, in most cases, to potential incidents or non-compliance with the impact prevention measures recommended in the Presentation memoire. The proposed investments are not likely to produce a significant negative impact during the period of their execution, provided that all the measures for preventing and reducing the environmental impact recommended, are enforced by the constructor.</p> <p>The environmental factors likely to be affected as a result of the works are water and biodiversity. The execution of the project will have a negative potential. impact on the community habitats or species. Regarding the sensitive areas from the point of view of the biodiversity, taking into account also the specificity of the proposed project and the implementation area, the riparian vegetation and the aquatic or semi-aquatic species may be affected. During the execution period, the construction works may contribute to certain disturbances of the ecological balances. Also, the emptying of the Calinesti accumulation is expected to have an impact on the aquatic environment and species.</p>
<p>Inputs (e.g. raw material, power sources, etc.)</p>	<p>Both natural materials, such as earth, stone, soil, and artificial materials will be used to complete the proposed project. Resources will be used mainly for the elevation of the existing levees, the stabilization of the banks with riprap prisms, retaining walls, as well as the construction of the Dimosag polder, the heightening of Calinesti dam and the rehabilitation of Hodos and Tamaseni dams. The required material will come from the works necessary to ensure the transit section of the flows of the riverbeds as well as from external sources of the perimeter of the proposed project (eg existing clay quarries).</p> <p>In carrying out the proposed project, no biodiversity or water resources will be used, with the exception of the water used to prepare the concrete needed to make part of the proposed structures (stone masonry). The reinforcement of the levees with be carried out with a vegetated layer. Also, willow may be used in the structure of the riprap prism (brushlayering).</p> <p>The natural resources used to carry out the works are: rough stone, broken stone, riprap, mineral aggregates (sand, gravel) from the local source, water, and artificial resources such as cement and concrete, steel, geogrid.</p> <p>The electricity required for the execution of the works will be provided by electric generators, no new connections being required. By the specificity of the works of hydrotechnical constructions, the necessary technological water will be provided from local sources and the potable water will be provided through bottled containers. Heating, if necessary, in the spaces of the construction sites, will be provided by electric radiators. During the period of operation of the investment, no consumption of natural resources is necessary.</p>
<p>Outputs (e.g. amounts and types of: discharges in air, discharges into the water system, solid waste)</p>	<p>In the execution phase, the sources of surface and groundwater pollution can be due to: improper storage of the raw materials used in the project; oil and fuel leaks from the operation of the machines; improper storage of technological waste that can affect water quality; improper placement or damage of sanitary containers within the site organization; the domestic waste water, resulted from the sanitary groups and from sanitization that take place within the organization of the site; faulty handling of vehicles which are transporting</p>

	<p>various types of materials. Changes within the physical characteristics of waterbodies will inherently occur due to excavation works below the water level and on the riverbanks. These will determine the slight increase of water turbidity and change the degree of oxygenation of the water. However, these last changes are expected to occur during the execution of works and their potential impact is considered to be of short term and of low intensity.</p> <p>Within the proposed project there is a potential impact on the air quality in the working and in the adjacent areas, generated by construction equipment, respectively the gas emissions resulting from the car traffic (pollutants by fuel consumption: NOx, CO2, CO, non-metallic volatile organic compounds, fuel particles), PM in the atmosphere due to the excavation works, material handling.</p> <p>Under normal activity conditions, the noise level in the site area and at its limit is lower than the permissible noise level. The main sources of noise and vibration are those of the period of execution works and are associated with the equipment used in this stage (excavators, dumpers, etc.). The activities that generate noise and vibration are: transportation on site of the raw material, handling of construction materials, the constructions carried out at the work fronts. The main sources of soil pollution are: the execution of the excavation works, the uncontrolled storage and on unmanaged spaces of the waste resulting from the construction activities, improper storage, directly on the ground, of the waste, accidental or unintentional leakage of fuels, oils, cement, chemicals or other pollutants during handling or storage.</p>
<p>Transboundary impacts (e.g. types, locations, magnitudes)</p>	<p>The location of the proposed works is in proximity to the north-western border of the country with Ukraine and in proximity to the border area with the Republic of Hungary. Works on existing levee on the right bank of the Tur River end at a distance of approximately 750 m from the border with Ukraine, and works on the existing levee on the left bank of the Tur River follows the border with Ukraine at a distance of approximately 1,000 m. As regards the proximity to the border with the Republic of Hungary, the elevation of the existing levee on the left bank of the Tur River is carried out at a distance of approximately 2,700 m from the border. With regard to the works in the riverbed, the nearest river threshold and the related bank reinforcements are proposed at a distance of approximately 1,000 m in a straight line, respectively 1,700 m on the water course from Ukraine and 2,700 m in a straight line and 5,000 m on the water course from the border with the Republic of Hungary. Given the the nature (elevation of the existing levees, riverbed thresholds) and the distance of the proposed works from the State border, it is estimated that the cross-border impact is small in scale and complexity, temporary and reversible, and the cooperation protocol with the Republic of Hungary on border flow are not affected during both the construction period and the operation period.</p>
<p>Proposed mitigation measures (e.g. if known, mitigation measures to prevent, mitigate, minimize, compensate for environmental effects)</p>	<p>In order to prevent and reduce the impact on the water and the soil the following measures will be taken: periodic verification of the functional state of operation machines in order to avoid possible malfunctions, the proper management of the raw materials, arranging the waste storage platforms in order to avoid contact with the water, maintaining the sanitary containers in a clean and permanently functional state, scheduling the works in the river bed so that the work duration is reduced to a minimum,</p>

	<p>avoiding as much as possible the execution of works on both sides of the river simultaneously, carrying out the works in such a way as to preserve the natural characteristics of the riverbed morphology. In order to minimize the impact on water bodies, it is recommended that the working fronts on the ground should be no more than 100 m and the ones on the riverbed should not exceed 50 m.</p> <p>The sites organization work must be properly designed, with modern facilities that reduce the air pollutants. During the execution period, the following preventive measures will be taken, to prevent air pollution: the activities that produce a lot of dust will be reduced during periods of strong wind, the working site it will be wetting to avoid the entrainment of fine dust powders in the atmosphere, periodic inspection of the vehicles and equipment regarding the level of carbon monoxide and other exhaust gas emissions, it is recommended to use machines equipped with engines which do not produce Pb emissions and emit low CO.</p> <p>The main measures to prevent and reduce noise and vibration: use of equipment with acoustically shielded motors, conducting activities only during the daytime, judicious scheduling of the activities and reducing the periods of simultaneous activity to a several sources of high intensity noise, limiting the routes that cross sensitive areas</p> <p>During the spawning period of fish species, a high concentration of powders, sands, gravel and others, resulting as a carry out of the works, may produce the death of the eggs, by covering them. This is the case of fish, amphibians and other aquatic organisms that lay in water. In order to reduce or avoid the occurrence of this type of impact, it is necessary to comply with a series of conservation measures / reduction of the impact.</p> <p>In order to reduce pollutants during the construction works and the impact on biodiversity, the following mitigation measures are proposed: the work schedule will be ensured and respected; the routes and work schedule will be limited to reduce the impact on the specific flora and fauna; the land areas allocated to the site organization and the construction works will be used so that no additional areas are occupied, the resulting materials (vegetation, soil, etc.) will not be stored uncontrolled, the resulting waste will be collected separately in properly arranged spaces; the ecological reconstruction of all the temporarily affected lands will be carried out, will not be planted or sown - for the purpose of regeneration / reconstruction - species that are not specific to the local flora and which could create the premises for the proliferation of opportunistic, invasive species; keeping existing vegetation along the watercourses, as far as possible; there will be no form of harvesting, capturing, killing, destroying or injuring the specimens in their natural environment, at any of the stages of their biological cycle; the work will take into account the sensitive periods of the species identified on the site of the proposed project; the works will not be performed during the night; machines with oil or fuel leaks or under any conditions that will do the work with impact on the aquatic environment, including large machines, will not be used; the works in the river bank will be carried out in compliance with all measures to prevent the impact.</p>
Additional information/comments	The proposed project is estimated to have an insignificant to moderate direct and indirect impact, in the short and medium term, only in the area and during the period when the works

	will be executed.
(iv) Proponent/developer:	
Name, address, telephone and fax numbers	Romanian Waters National Administration Someș Tisa Water Basin Administration Vanatorului Street, no 17, Cluj-Napoca
(v) EIA documentation	
Is the EIA documentation (e.g. EIA report or EIS) included in the notification?	Presentation Memoire
If no/partially, description of additional documentation to be forwarded and (approximate) date(s) when documentation will be available	The EIA procedure is currently in the Screening Stage.
Additional information/comments	
2. POINTS OF CONTACT	
(i) Point of contact for the possible affected Part or Parties:	
Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix): Name, address, tel and fax numbers	<p>Hungary</p> <p>Point of Contact regarding Notification for EIA: Ms. Virág POMOZI Adviser Department of Environmental Preservation Ministry of Agriculture Apáczai Csere János u. 9. 1051 BUDAPEST Telephone: +36 1 795 6131 E-mail: virag.pomozi(at)am.gov.hu</p> <p>Focal Point for administrative matters: Dr. Hunor ORBÁN HoD Department of Environmental Preservation Ministry of Agriculture Apáczai Csere János u. 9. 1051 BUDAPEST Hungary Telephone: + 36 1 795 2452 E-mail: hunor.orban(at)am.gov.hu</p> <p>Ukraine</p> <p>Point of Contact regarding Notification and Focal Point for administrative matters: Mrs. Oleksandra KOZLOVSKA Director of the Department for International Cooperation Ministry of Energy and Environmental Protection of Ukraine V. Lypkivskogo street, 35 03035 KYIV Telephone: +38-044-206-38-55 E-mail: aleksandra.kozlovskaya(at)mev.gov.ua</p>
List of affected parties to which notification is being sent	Hungary, Ukraine
(ii) Points of contact for the Party of origin	
Authority responsible for coordinating activities relating to the EIA (refer to Decision I/3, appendix) Name, address, tel and fax numbers	<p>Ministry of Environment, Waters and Forests Romania 12, Blvd. Libertatii, Sector 5, Bucharest, Romania -040129</p> <p>Point of contact: Ms. Dorina MOCANU</p>

	<p>General Director General Directorate for Impact Assessment and Pollution Control Ministry of Environment, Waters and Forests 12, Blvd. Libertatii, Sector 5 RO - 040129 BUCHAREST Telephone: +40 21 408 9595 Fax: +40 21 316 0421 E-mail: dorina.mocanu(at)mmediu.ro</p> <p>Focal Point for administrative matters: Ms. Mihaela MACELARU Counsellor for Impact Assessment Unit for Impact Assessment General Directorate for Impact Assessment and Pollution Control Ministry of Environment, Waters and Forests 12, Blvd. Libertatii, Sector 5 RO-040129 BUCHAREST Telephone: +40 21 408 9537 Fax: +40 21 316 0421 E-mail: mihaela.macelaru(at)mmediu.ro</p>
Decision making authority if different than authority responsible for coordination activities relating to the EIA Name, address, tel and fax numbers	<p>Environmental Protection Agency Satu Mare issues the final EIA Decision.</p> <p>Ministry of Environment, Waters and Forests is in charge with the transboundary EIA procedure.</p>
3. INFORMATION ON THE EIA PROCESS IN THE COUNTRY WHERE THE PROPOSED ACTIVITY IS LOCATED	
(i) Information on the EIA process that will be applied to the proposed activity	
Time schedule:	
Opportunities for the affected party/parties to be involved in the EIA process	Yes. Hungary and Ukraine may decide to participate in the environmental impact assessment (EIA) procedure and respond to the notification by <u>3 April 2020</u> .
Opportunities for the affected party/parties to review and comment on the notification and the EIA documentation	Yes. Comments and requirements for the scoping document are expected by <u>17 April 2020</u> . Hungary and Ukraine are also invited to send information relating to the potentially affected environment under their jurisdiction, so that the information can be used for the preparation of the EIA documentation.
Nature and timing of the possible decision:	EIA decision to be issued during this year.
Process for approval of the proposed activity	<p>In Romania, the EIA procedure is conducted according with the Law 292/2018 on environmental impact assessment of certain public and private projects.</p> <p>The EIA procedure comprises participation of the Romanian authorities and public and also the participation of the likely affected Party's authorities and public.</p>
Additional information/comments	
4. INFORMATION ON THE PUBLIC PARTICIPATION PROCESS IN THE COUNTRY OF ORIGIN	
Public participation procedures	When a project is likely to affect the environment of another Party, the national competent authority for environmental protection notifies the potentially affected Party, as soon as possible. Then, the environmental authority from the affected Party informs its own public from the potentially affected areas and its concerned authorities. In 6 weeks from sending the notification, the Party of origin expects from the affected Party the summary of its public's and competent

	<p>authorities' comments, in English. The scoping documents will include the requests sent by the affected Party, as a response to the notification.</p> <p>After its elaboration, the EIA documentation is made available to the public, which is given 30 days to express its opinion. The EIA documentation is also sent to the affected Parties, which then send their public's and competent authorities' comments, in English, to the Party of origin.</p> <p>A public hearing is organized in the area of the project. If the affected Party finds it necessary, a public hearing can be held on its territory, as well.</p> <p>The final EIA decision takes into consideration the comments received from the affected Party the same way as those of the national public and authorities.</p>
Expected start and duration of public consultation	After the elaboration of the EIA documentation, the public is given 30 days to express its opinion. Also, a public hearing is organized in the area of the project, which is announced at least 30 days before the hearing. If the affected Party finds it necessary, a public hearing can be held on its territory, as well.
Additional information/comments	
5. DEADLINE FOR RESPONSE	
Date	Expected response to the notification is 3 April 2020.