



MINISTRY OF ENVIRONMENT,  
WATERS AND FORESTS

MINISTER CABINET

Nr. DGEICPSC/107908/30 .06.2023

To: Ms. Irena Vujovic, Minister  
Ministry of Environmental Protection of the Republic of Serbia

Ref: Notification according to art. 3 of the Espoo Convention on Environmental Impact Assessment in a Transboundary Context for the project „Timișoara - Moravița Highway including utility networks in the corridor of the project”, beneficiary CNAIR S.A.

Dear Minister Vujovic,

The Ministry of Environment, Waters and Forests of Romania sends cordial greetings to the Ministry of Environmental Protection of the Republic of Serbia and particularly appreciates the bilateral cooperation in the field of environmental protection.

In accordance with art. 3 of the Convention on environmental impact assessment in a transboundary context (Espoo Convention) we hereby submit the notification regarding the project Timișoara - Moravița Highway including utility networks in the corridor of the project”, beneficiary CNAIR S.A.

The project aims to build a highway sector between the localities of Timișoara and Moravița, including the required border crossing point, thus ensuring the necessary basis for the growing transport demand, as well as a high degree of safety of the road traffic.

The implementation of the Project will require several construction works, including:

- Construction management site;
- Arrangement of the land, including the demolition works;
- Earthworks;
- Relocation or protection works related to the intersected facilities;
- Structural works (bridges, footbridges, passageways);
- Hydrotechnical works;
- Rainwater drainage system;
- Consolidation works;
- Traffic protection works;
- Environment protection works;
- Landscaping works.

The actual implementation of the highway will, first of all, require earthworks. The earthworks support the roadway and ensure its connection to the natural terrain.

The connection with the Serbian side of the highway is going to be established, by setting up a new border crossing point.

The notification according to art. 3 of the Espoo Convention, accompanied by the presentation memorandum, will be sent electronically to the Focal Point of the Republic of Serbia for the Espoo Convention.

Please send us your response regarding the decision to participate in the cross-border impact assessment procedure by the 1<sup>st</sup> of August 2023.

We also request that you submit the comments of the public and the competent authorities of the Republic of Serbia, as well as your requests for EIA documentation, by the 15<sup>th</sup> of August 2023.

At the same time, please provide us with information about the state of the environment that could be affected by the project on the territory of the Republic of Serbia, to be used in the preparation of the documentation regarding the assessment of the impact on the environment.

Please accept, Mr. Minister, the expression of my high consideration.

Mircea FECHET

Minister  


**TIMISOARA - MORAVITA HIGHWAY**  
**NOTIFICATION TO AN AFFECTED PARTY OF A PROPOSED ACTIVITY UNDER**  
**ARTICLE 3 OF THE ESPOO CONVENTION**

<b>1. INFORMATION ON THE PROPOSED ACTIVITY</b>	
<b>(i) Information on the nature of the proposed activity</b>	
<b>Type of activity proposed</b>	
<b>Construction of highways</b>	
<p>The project aims to build a highway sector between the localities of Timișoara and Moravița, including the required border crossing point, thus ensuring the necessary basis for the growing transport demand, as well as a high degree of safety of the road traffic.</p> <p>Timișoara – Moravița highway is included in the 2020-2030 Investment Plan for the development of the transport infrastructure, of whose role is the following:</p> <ul style="list-style-type: none"> <li>• Investment plan for prioritizing the investments, setting-up a positive condition in relation with the new multi-annual financial framework;</li> <li>• Update the implementation strategy of the General Transport Master Plan;</li> <li>• Reference standard document for relevant public policies and all institutions involved in the development of the national infrastructure objectives of transport.</li> </ul> <p>The Investment Plan defines the transboundary CTF 1 corridor (Banat Corridor) - this links the North of the CC 1 Trans-Carpathian connection corridor (Timisoara area) to Serbia, through Moravita Border Crossing Point, in the South. The national and transboundary road mobility is achieved along the TEN-T Core corridor.</p> <p>In a regional context, this highway can represent a link between two European corridors with East-West development: the former pan-European corridor IV in the North (Czech Republic - Austria - Hungary - Romania), and the former pan-European corridor X in the South (Italy - Slovenia - Croatia – Serbia – Macedonia/Bulgaria - Greece).</p>	
<b>Is the proposed activity listed in Appendix I to the Convention?</b>	Yes
<p>The project is listed in Appendix 1 to the Convention at point 7 „Construction of motorways, express roads and lines for long-distance railway traffic and of airports with a basic runway length of 2 100 metres or more (‘)’”.</p> <p>The Project falls under Annex 1, item 7 (b) “construction of highways and express roads” of the Law no. 292/2018 regarding the environment impact assessment related to public and private projects.</p>	
<b>Scope of proposed activity (e.g. main activity and any/all peripheral activities requiring assessment)</b>	
<p>The overall Project’s scope is to improve the economic competitiveness of Romania through the development of the transport infrastructure, thus contributing to the development of the internal market with the aim of creating the conditions required to increase the volume of investments, enhance sustainable transport and cohesion within the European roads network.</p> <p>The construction project of the „Timișoara-Moravița Highway” implies the development of an infrastructure designed to provide proper traffic conditions for the national and international transit of goods and people. There will also be improvement of the national traffic conditions in terms of safety, lower polluting emissions, lower operational costs, thus complying with the requirements of economic development materialized by adjusting the national road network to the real demand of transport.</p> <p>The works established by the Project are the following:</p> <ul style="list-style-type: none"> <li>• infrastructure and superstructure works, earthworks (excavation works, backfilling, etc.);</li> <li>• consolidation earthworks (backfill slope cutting works, consolidation of the weak foundation soil and drainage of the ground waters);</li> <li>• hydrotechnical works;</li> <li>• road structure (construction of bridges and passage ways, footbridges, etc.);</li> <li>• construction of road junctions in the areas crossed by the highway or branching out with other</li> </ul>	

- communication ways;
- traffic safety works;
- water catchment and drainage works;
- environment works (i.e.: sound-absorbing panels, fencing, under-crossings for fauna, etc.);
- specific construction works related to road infrastructure – parking, services areas, maintenance and coordination centre (CIC);
- removal and protection works of the facilities.

**Scale of proposed activity (e.g. size, production capacity, etc.)**

The length of the Timișoara - Moravița highway project is around 73 km.  
 The designed travel speed on Timișoara - Moravița highway is 140 km/h.  
 From administrative stand-point, the highway will be built on the territory of the following administrative-territorial units (UAT) (within the built-up area and outside the built-up area): UAT Remetea Mare, UAT Recaș, UAT Bucovăț, UAT Moșnița Nouă, UAT Giroc, UAT Sacoșu Turcesc, UAT Pădureni, UAT Liebling, UAT Jebel, UAT Voiteg, UAT Birda, UAT Deta, UAT Denta, UAT Moravița, on the Romanian territory.

**Transverse profile**

The platform of the highways' transverse profile has 26.00 m width, out of which:

- the roadway (2 lanes for each travel direction): 4 x 3.75 m = 15.00 m;
- mid lane (waterproofed): 3.00 m;
- emergency stop lane, one on each direction of travel: 2 x 2.50 m = 5.00 m;
- road shoulders: 2 x 0.50 m = 1.00 m;
- guiding lanes: 4 x 0.50 m;

In addition to the platform, there will also be the working width "w" (according to AND593-2012), required for setting up the road guards.

- the area for the road guard (besides the platform): 2 x 1.70 m.
- The transverse profile of the U-turns and junction arms have the following characteristics:
- for one-way U-turns and junction arms: the platform will have the width of 6.00 m, including the 4.00 m of the roadway and two road shoulders of 1.00m each, out of which 0.25m represents the traffic engaging lane. In addition to the platform, there will also be two areas of 1.70m each, where the road guard will be set-up;
- for bidirectional U-turns and junction arms: the platform will have the width of 10.50 m, including the 7.00 m of the roadway and two road shoulders of 1.00m each, out of which 0.25m represents the traffic engaging lane. In addition to the platform, there will also be two areas of 1.70m each, where the road guards will be set-up.

Having regard to the local features of the highway, the sides of the platform were so arranged as to enable the setting up of the water catchment and discharge facilities, as well as the safety devices.

The connection between the existing road network and the highway will be achieved through a system of road junctions. The site and the type of junction were recommended in accordance with the outcome of the Traffic report.

There are 6 road junctions designed to be set-up on the length of Timișoara – Moravița highway, and they are:

Item no.	Denomination	Crossed road	The interval established to complete the work		The distance to the nearest protected natural area (km)
1	A1 Remetea Mare	It ensures the connection to DN6, A1	0+000		3.15 RONPA0755
2	DJ 592 Albina	It ensures the connection to DJ 592	13+300	15+300	0.001 ROSCIO109

**Timișoara - Moravița Highway**

3	VO Timișoara Sud	It ensures the connection to VO Timișoara Sud	21+700	23+200	0.06 ROSCI0109 ROSPA0128
4	DN 59 Pădureni	It ensures the connection to DN 59	31+350	32+850	0.49 ROSCI0109 ROSPA0128
5	DN 58B Voiteg	It ensures the connection to DN 58B	50+340	51+500	7.03 ROSPA0127
6	DN 57 Moravița	It ensures the connection to DN 57	69+600	70+200	7.68 ROSCI0425

**Facilities of the highway**

The following facilities are designed for Timișoara - Moravița highway:

- Maintenance and coordination centre (CIC);
- Short term car parking spaces (PSD);
- S3 type servicing spaces;
- Border crossing point.

The selection of the highway's facilities site took into consideration the optimum distance from the existing networks (water supply and sewerage systems, power networks, phone networks, road networks, etc.).

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

The implementation of the Project will require several construction works, including:

- Construction management site;
- Arrangement of the land, including the demolition works;
- Earthworks;
- Relocation or protection works related to the intersected facilities;
- Structural works (bridges, footbridges, passageways);
- Hydrotechnical works;
- Rainwater drainage system;
- Consolidation works;
- Traffic protection works;
- Environment protection works;
- Landscaping works.

The works required for the management of the construction site will consist of the following:

- Constructions and facilities held by the Contractor, equipped with various means at its choice, which enable the fulfilment of the construction and quality liabilities and in regards to the control over the performance of the works;
- All materials, facilities and equipment, control systems required for the construction, in accordance with the provisions established by the Project, standards in force and environment protection requirements.

The arrangement of the management site will require the following works:

- Demarcate and fence the premises of the management site;
- Prepare the land surface in order to bring the necessary equipment;
- Mark up the site of the constructions, access roads, offices, warehouses, storage buildings, garage for the transport means and the equipment required for the development of the Project;
- Organize the storage areas for materials, raw materials and waste, along with the proper arrangement of the storage place by setting-up concrete platforms and perimeter ditches for the catchment of eventual accidental losses. There will be areas provided with concrete platform, fence and warning signs

established for storage or stockpiling of the raw materials, materials and waste;

- Set-up the containers for the organisation of the offices, warehouses, laboratory of construction materials, workshop specific to the maintenance of the equipment;
- Set-up the stations for manufacturing the pavement mixtures, concrete stations, stations for manufacturing the stabilized ballast and the crushers and verification of the catchment and confinement systems related to the air polluting emissions;
- Install hydrocarbon separators in areas where the parking places and the fuel/oil handling site will be established;
- Ensure the utilities - power, water, domestic and technological wastewater catchment and treatment;
- Source and locate the fire extinguishers and indicate them according to the legal provisions in force;
- Ensure the lighting of the constructions.

In case the management site (office included) of the Contractor will be set-up within some existing industrial platforms, then some of the above-mentioned operations will not be required, depending on their characteristics.

The actual implementation of the highway will, first of all, require earthworks. The earthworks support the roadway and ensure its connection to the natural terrain. Through the road structure, they overtake the efforts occurring from the running vehicles.

The performance of the earthworks includes the following categories of works:

- Preparatory works;
- Main works;
- Finishing works.

#### **Preparatory works**

These works are carried out prior to the basic works and have the purpose of bringing the natural terrain (on the width of the highway area) to the state where it can be dug or receive the earth filling.

The preparatory works are the following:

- Procurement of the land;
- Drawing up the work platform;
- Stripping and stockpiling the top soil layer;
- Site arrangement;
- Protection and relocation of the facilities;
- Environment protection arrangements and restoration;
- Ammunition disposal (mining project) - carried out on the entire route of the highway, more specifically on the road territory.

#### **Main works**

The main works are performed after the completion of the preparatory works, i.e. the actual earthworks, which consist of:

- loading, transporting and levelling the earth in the backfill;
- soil compaction.

Fillings that are usually compacted, will be carried out using the following types of equipment:

- compactor cylinders;
- tankers for the transport of water needed to adjust the humidity of embankments put into operation;
- bulldozers, graders.

#### **Finishing work**

The assembly of finishing works includes the operations necessary to bring the platform, slopes and surface water drainage facilities to a good working condition and a suitable aesthetic presentation.

Depending on the road on which they are built and the length of the necessary openings (appropriate to the specific of the crossed obstacle and the assessment of the proposed longitudinal profile), the structural works fall under the following categories:

#### **Bridges**

The superstructure of the highway's bridges consists of two decks (one for each direction of travel), made of prefabricated pre-compressed concrete beams to be used for openings of up to 40.00 m, metal beams for openings between 50.00 - 90.00 m and variable height monolithic precompressed concrete beams, cast in cantilever, for openings between 90.00 – 150.00 mm.

The implementation of the continuity system at the level of the over-concreting slab at the decks of the highway structures will lead to the creation of a reduced number of watertight devices to cover the expansion joints, and therefore to lower post-construction maintenance costs.

The main advantages of this solution are:

- A lower number of beams within the cross section;
- The use of prefab items enable a higher construction speed;
- A better control over the performance of the item.

For an effective response of the superstructure to seismic actions, monolithic reinforced concrete mezzanines are provided at both ends of the deck, and anti-seismic devices are installed on the infrastructure benches.

The abutments of the highway bridges are massive abutments made of reinforced concrete, with turned walls and a retaining wall. They are founded indirectly, by means of drilled piles of large diameter. The drilled piles are made of monolithic reinforced concrete, with a different length depending on the loads from the superstructure and the lithological structure of the soil in which they are made.

In the horizontal plane, the connection of the structure with the highway embankment is done with the help of connection plates, to avoid different settlements between the road system on the road and the road system on the superstructure of the structural works. The connections of the structural works with the highway's embankment, achieved on vertical alignment, are carried out, depending on the existing on-site status of each structure, with quarter cones, retaining walls made of gabions, etc.

The piles of the structures have lamellar elevations, provided at the top side with a reinforced concrete collar beam. They are indirectly founded by means of drilled piles of large diameter, monolithically made of reinforced concrete. The drilled piles are joint together at the top side with monolithic reinforced concrete grating.

At each end of the structures, water drains and access stairs will be constructed.

#### **Passageways**

The passages have the width of the roadway of about 7.80 m with sidewalks of about 2.35 m on each side of the superstructure. The minimum opening of passages crossing the highway is 28.00 m.

The deck of the passageways is composed, in cross-section, of prefabricated beams, joint together with monolithic reinforced concrete mezzanines and in their upper part, by means of a monolithic cast reinforced concrete surfacing plate. The static scheme of the structure is of the "continuous beam" type.

The abutments of the passages over the highway are of the sunk type, with two pillars, made of monolithic reinforced concrete, with turned walls. The abutments will be founded indirectly by means of drilled piles of large diameter.

In the horizontal plane, the connection of the structure with the highway embankment will be done with the help of connection plates, to avoid different settlements between the soil filling behind the abutments and the highway embankment.

#### **Encased structures and footbridges**

These structures are intended for the crossing of both watercourses and various other communication routes (national road, county roads, communal roads). They are located both on the highway route and on other adjacent routes (road junctions arms). The site alternatives, along with the obliquity imposed by the status of



the ground and the size that must be ensured, lead to a significant variety of lengths of these types of structures.

In cross-section, the structures are of the frame type, monolithic, made of reinforced concrete minimum class C30/37. It is based on a layer of concrete with the role of protection against the action of the freeze-thaw phenomenon. All concrete areas which come in contact with the ground will be protected by applying appropriate insulating solutions. The draining filling, covered in geotextile, will be performed behind the walls. The discharge of the seepage water will be done longitudinally of the structure (respectively transverse to the highway), through PVC barbicans. The exterior of the slab will be protected with a waterproofing membrane, adequately protected with a special mortar. The connections with the embankments will be made through C30/37 reinforced concrete wings (founded similar to the frame structure) and reinforced concrete connection plates.

The drainage of the rainwater was achieved by designing trenches and culverts which discharge into the emissaries, post suitable treatment process. The rainwater goes through decanters and hydrocarbon separators before it is discharged in emissaries, so it will not negatively influence the quality of the emissary waters.

The separators will be fitted on a layer of compacted aggregates. Another layer of sand will be placed over this layer.

The compaction of the fillings around the hydrocarbon separators will be done using light machinery. The filling will be settled and compacted at the same level around the separators.

The installation of hydrocarbon separators and the construction of the settling basins require the arrangement of the work platform and the actual layout of the works.

The solutions regarding the consolidation of the earthworks were established having regard to the following aspects:

- ensure the geometrical elements of the road platform;
- support for the road platform;
- consolidation of the cut-and-fill slopes;
- improve the stability of the land on where high embankments are built;
- drainage of the waters from the slopes and the foundation terrain;
- discharge of the surface waters and those collected from the earthworks, and their guidance towards emissaries.

The types of consolidation works were selected on the grounds of the geotechnical study and geological maps.

The consolidation works are necessary for ensuring:

- the stability of the filling works;
- the stability of the supporting terrain in the case of high embankments;
- the stability of the supporting terrain, by improving its physical-mechanical characteristics

The Project includes the following types of consolidation works:

**Layer built of granular material protected by geotextile, in the case of inconsistent foundation terrain**

The water existing in the foundation terrain reaches the embankment body under the loading posed by the road body and through the capillarity effect, leading to the reduction of their mechanical characteristics. There will be a capillarity disruption layer built for the scope of interrupting the water capillary ascent, where the case may be, consisting of granular material protected by geotextile / synthetic Geocomposite.

**Cushion of granular material reinforced with geogrid protected by geotextile**

The cushion of granular material reinforced with geogrid and protected by geotextile has the role of preventing the capillary ascent and take over the stretching efforts occurring within the embankment bodies due to their traffic loading capacity and their uneven compaction within cross section.

They maintain the state of compressive stress and thus prevent the occurrence of fissures or cracks within the

filling material.

The enforcement of the granular material cushion is achieved using geogrid, depending on the physical-mechanical characteristics and the foundation terrain stability, as well as the height of the embankment, according to the stability calculations.

#### **Earthworks consolidation**

##### **Earthworks with the height below 6m**

The slopes will be planted with grass seeds for the purpose of preventing the erosion of the surface. If necessary, the bottom of the earthworks will be provided with a granular material layer, covered with geotextile, with anti-capillary role.

##### **Earthworks with the height over 6 m**

The slopes exceeding 6 m height will have the following composition:

- slope of  $V=2.0$  m /  $H=3.0$  m measured from the shoulder of the road guard slope;
- 5 m wide berm provided with a triangle culvert for taking over the waters from the slope; the berm is located at 6 m height measured on vertical from the shoulder of the road guard slope;
- from the intermediary berm up to the natural terrain, the slope is  $V=1.0$  m /  $H=2.0$  m.

The implementation of the Project requires the relocation of some networks of utilities (gas pipeline, phone lines and power lines).

These will be relocated in accordance with permits obtained from the owners.

The route of the Highway crosses several roads and interrupts their continuity.

Depending on their importance, the Project established dislevelment intersections without access to the highway (overpass type) or their diversion along the highway and then their clustering in order to create a common crossing over the highway. In the case of roads of communal or county relevance, the Project established underground or above-ground passageways in the intersection area.

The signaling and marking system was designed both on the highway and on the lower-category roads that will intersect the highway, as well as on the road network in the highway corridor, where the road signs were designed for orientation towards the highway.

The materialization of the system set-up for organizing and operating the traffic through signs and markings, has the purpose to increase the degree of safety and flow on the entire network of roads that join the system, and to allow all those who drive on these roads to get timely indications in order to join the direction desired, thus eliminating confusion, wrong maneuvers, additional routes and even traffic jams.

In order to guide the traffic in each junction, two complete portals were provided (one on each side of the junction).

The consoles were designed for the prior-indication of the road junctions and service areas.

Having regard to the way in which the traffic takes place on the highway (travel speed, traffic intensity), it is necessary for the drivers to receive a series of information related to road conditions, events occurred on the highway, warnings, etc.

This will be done through miscellaneous messages, communicated from the highway coordination centre, and they will be displayed on various message boards.

The highway, being made up of two separate one-way lanes, was designed to have the milestones set-up on the edge of the roadway.

Catadioptrics will be mounted on the road guard runners.

The highway route, as well as on the roads intended for international traffic, will have very large signs provided, as well as very large format of traffic junction arms and large format of national roads; current size signs has been established for all the other roads.

Retro-reflective elements (reflectors, reflective flyers or other reflective elements) will be mounted on the

safety road guards.

The pedestrian road guard will be located on both sides of the structures, at the edge of the sidewalk, in order to protect the pedestrian traffic (including the maintenance personnel on site in case of road accidents).

Very large format signs will be provided on the road junctions arms.

The consoles on the national roads will be protected by zinc-coated metal road guards. Portals and consoles will have a closed contour, and they will be protected through zinc-coating.

#### **Vertical indicators - road signs**

Vertical road signs designed for the Timișoara - Moravița highway comprise the following items:

- warning signs;
- regulatory indicators;
- guidance and information indicators;
- prohibition signs;
- additional signs.

#### **Horizontal signage – markings**

Depending on the location where they are applied and the role of the marking within traffic guidance, there will be several types of marking provided:

- longitudinal markings;
- delimitation markings of the roadway;
- transverse markings;
- miscellaneous markings;
- side markings.

For traffic safety reasons, the project will include safety railing, as well as pedestrian railing.

The materialization of the system required for organizing and operating the traffic, through signs and markings, has the purpose to increase the degree of safety and flow on the entire network of roads that joins the system, and to allow all those who drive on these roads to get timely indications in order to join the direction desired, thus eliminating confusion, wrong maneuvers, additional routes and even traffic jams.

The signaling and marking system was designed for the highway and for the lower category roads that will intersect the highway, as well as the road network within the corridor including signs for designed for guidance towards the highway. This was done in accordance with AND 604-2012 - Guidelines for planning and designing road signage and information, to provide continuity, consistency and recognition.

Traffic signs are secured by metal poles, portals or consoles.

#### **Environment protection works**

The scope of the environment protection works is:

- To avoid and mitigate the Project's impact on biodiversity (both within the protected natural areas, as well as outside of them);
- Reduce the Project's impact on the air quality;
- Avoid and reduce the Project's impact on the waters' status;
- Mitigate the Project's impact on soil quality;
- Avoid and reduce the Project's impact on the population's health;
- Reduce the Project's impact on the landscape.

The main types of environment protection works that will be carried out within the Project, are represented by:

- Sound-absorbing panels, both for protection of the inhabited areas, as well as for the protection of the natural areas;
- Anti-collision panels of whose role is to reduce the collision risk of the flying fauna species with road traffic;
- Under and above ground crossings set-up for the fauna species, to provide a proper level of permeability for the infrastructure;
- Protection fence to prevent fauna species from entering the roadway along the entire length of the highway and on both sides of it;

- Suitable pretreatment/treatment facilities for collected rainwater, as well as for domestic wastewater generated from the services areas, parking places and the maintenance and coordination centres;

The following water treatment constructions are designed for the protection of the soil and water quality:

- Sedimentation tanks;
- Hydrocarbon separators;
- Retention basins.

The number of these constructions was established taking into consideration the water basins of the area.

The Project includes the construction of 42 retention basins, 215 hydrocarbon separators and 174 sedimentation tanks.

To ensure permeability for fauna species, the Project included the construction of undercrossing structures for this purpose. The bridges that cross over the watercourses, but also those designed to cross over forest or field roads provide a double functionality, so they can also be used as passageways for the fauna.

Thus, the Project ensures the following types of structures that are able to provide such double functionality:

- Footbridges;
- Bridges;
- Passageways

A number of 135 slabbed footbridges are designed within the highway project, out of which 47 on the road junctions and 6 on temporary roads; 13 bridges on the highway, 4 on road junctions and 1 on temporary roads; 9 passageways on the highway, 4 on road junctions and 15 on other roads.

The landscaping project will include the following operations:

- removal and stockpiling the topsoil;
- covering all unexposed slopes of all embankments with earth and planting grass species and shrubs;
- restoration of the areas affected by the works (service roads, storage and stockpiling areas, etc.), by covering them with soil and planting appropriate grass species and shrubs;
- planting shrubs. The type of shrubs that will be used will be chosen so as to correspond to the height of the embankment of the adjacent road;
- all plant species that will be used for landscaping will be characteristic of the area;
- the stripped topsoil will be stockpiled for future use to cover the soil excavation areas and the embankments, and to rearrange the areas affected by the works.

The basic fund of the landscaping consists of seeding and grassing. Covering the green spaces near the roadway, the grassy surfaces, in addition to the role of soil stabilizer, they also constitute the foundation on which the shrub vegetation is created.

The location of the road junctions is indicated in Figure 2 - Location of Timișoara – Moravița highway in the Project Presentation Memoir attached.

**Description of purpose of proposed activity**

**Rationale for proposed activity (e.g. socio-economic, physical geographic basis)**

The traffic evolution recorded on DN 59 from 2000 until 2015 emphasises that:

- the car traffic recorded an upward trend throughout the entire assessment period, exceeding the national average;

- heavy loads and bus traffic recorded a decrease recorded in 2010, followed by an increase recorded in 2015, exceeding the average of year 2005. It is also noted that heavy traffic and buses traffic is below the national average corresponding to the same category of vehicles.

The traffic's ascending trend recorded on DN 59 in the position corresponding to the automatic PEEK meter continues after 2015, the annual growth rate being 6% per year for the period 2015-2019.

Also based on data gathered from automatic meters, an increase of the traffic was observed from 2015 until 2019 on DN 57, DN 58B roads and a part of DN 6 (between Recas and Timisoara road junction).

Currently, the average speed on DN59 is about 74 km/h while, at the European level, the average speed of travel on a major national network (Trunk), should be between 90-100 km/h, and the minimum average speed recorded for highways and express roads with high quality standards is 100 km/h.

As regards the international traffic through Moravita Border Crossing Point, data provided by the General Border Police Inspectorate were processed in relation with the volumes of road and railway traffic recorded at the border crossing points.

In 2019, the annual daily average of vehicles transiting Moravita Border Crossing Point was 913 vehicles, about 83% passenger vehicles and 17% goods transportation trucks. For the period 2015-2019, the reviewed data emphasised an increase of the traffic by an average of 50% for total vehicles. This increase is due to the travel flow of the cars and minibuses, while coach traffic is quasi-constant, and freight traffic has an increase of 20% only.

The number of deaths on DN 59 related to the number of residents of the towns located along DN 59 between Timisoara and Moravita Border Crossing Point is higher than the EU average, which is 60 fatalities to one million inhabitants, but with lower values recorded in the 2018-2019 period.

In regards to the national road 59 (DN 59), the section from Timisoara (at the junction with DJ 595) to Moravita (Border Crossing Point), has a length of about 57 km, approximately 17% of the road route crossing through the locality.

Following the current status assessment, the following conclusions can be drawn:

- the level of service on DN 59 is ranked A for the section between Timisoara and Sag, and between Moravita and Moravita Border crossing point, and B between Sag and Moravita, but the traffic trend here is ascending
- at least 17% of the existing road unfolds within the built-up area of the towns, a fact that has an unfavorable impact on average traffic speeds and on the population, both from the environmental point of view (air pollution, noise), and from an economic point of view (higher transport costs).
- there is a high number of localities that it crosses (Timisoara, Sag, Jebel, Voiteg, Denta, Moravita), including pedestrian crossings and many left-right access ways, which increase the risk of serious accidents' occurrence.
- The average travel speed of 74 km/h is below the recommended standards and the European average.

The overall purpose is to improve the economic competitiveness of Romania through the development of the transport infrastructure, thus contributing to the development of the internal market, with the scope of increasing the volume of investments, promoting sustainable transport and cohesion within the European road network.

Besides its national relevance, the Project of "Timisoara-Moravita Highway" will provide proper conditions for the development of the national transport of goods and people transiting the territory of Romania. Depending on the status of national roads rehabilitation or undergoing rehabilitation, the highway will be able to receive and distribute road traffic through them, through its junctions; it will cover the necessary traffic capacity and provide proper travel conditions related to the TEN-T road network, with minimum negative effects for environment and land occupation.

They will improve the travel conditions at the level of national road network, including in terms of road safety, the pollutant emissions will be reduced, the operating costs will be reduced, thus meeting the requirement of economic development materialized by adjusting the national road network to the existing transport demand.

This project will generate positive and important socio-economic effects, including through „the decrease of the distances”, as well as regional development by increasing the area of „gravitational” economical impact of the cities on their smaller, „satellite” towns.

The project is included in the POIM 2014-2020 portfolio, which was issued to meet Romania's development needs identified in the 2014-2020 Partnership Agreement and in accordance with the CSC and the Position Document of the European Commission services. The POIM strategy is oriented towards the objectives of the 2020 European Strategy, focusing on sustainable growth by promoting an economy based on low carbon consumption through energy efficiency measures and the promotion of green energy, as well as by promoting environmentally friendly ways of transport and a more efficient use of the resources.

Ensuring a road link at the highest possible standard, namely the „Timisoara - Moravita Highway” is a commitment undertaken by the Government of Romania during the work meeting held in Thessaloniki, Greece, on 04 July 2018, a meeting in which the Governments of Serbia, Bulgaria and Greece also attended.

Timisoara-Moravita Highway is included in the Investment Plan for the development of the transport infrastructure for the period 2020-2030, a plan that has the following roles:

- Investment plan for investment prioritization, constituting a favouring condition in relation with the new multiannual financial framework,
- Update of the implementation strategy of the Overall Transport Master Plan;
- Reference regulatory document for the relevant public policies and all institutions involved in achieving the infrastructure objectives of national transport.

The Investment Plan defines the cross-border corridor CTF 1 (Banat Corridor) – in the North side, it connects the connectivity corridor CC 1 Trans-Carpathians (Timisoara area) with Serbia, through Moravita Border crossing point, in the south. Road national and transboundary mobility is achieved along the TEN-T Core corridor.

In a regional context, this highway can represent a link between two European corridors with east-west development: the former pan-European corridor IV in the north (Czech Republic - Austria - Hungary - Romania) respectively the former pan-European corridor X in the south (Italy - Slovenia - Croatia - Serbia – Macedonia/Bulgaria - Greece).

The implementation of the project will lead to:

- Ensuring a fast connection between two European corridors;
- Improvement of the travel conditions on the existing road network, by reducing the travel time due to the increase of the driving speed;
- Lower pollutant emissions from localities and improvement of the living conditions;
- Socio-economic development of the adjacent areas.

**Additional information/comments**

Additional information can be found in the attached memoir.

**Information on the spatial and temporal boundaries of the proposed activity**

**Location**

**Description of the location (e.g. physical-geographic, socio-economic characteristics)**

From administrative stand-point, the highway will be built on the territory of the following administrative-territorial units (in and outside the built-up area): UAT Remetea Mare, UAT Recaş, UAT Bucovăţ, UAT Moşniţa

Nouă, UAT Giroc, UAT Sacoșu Turcesc, UAT Pădureni, UAT Liebling, UAT Jebel, UAT Voiteg, UAT Birda, UAT Deta, UAT Denta, UAT Moravița.

The starting point considered for the Project is the current road junction existing on A1, at Remetea Mare, which enables the connection between A1 and DN6, from where on it runs towards South, under-crossing DN 6 and over-crossing the CF 900 Bucuresti-Timisoara railway, between the localities of Remetea Mare and the East side of Bucovăț (between Bucovăț and Bazoșu Nou). The route bypasses Albina and Urseni, at the border of the approved PUZ (Zone urbanism plan), running parallel with Lunca Timișului and intersects ROSCI0109 Lunca Timișului on the West side of Urseni, for approx. 2.3 km.

There is a road junction established at South of Giroc, at the intersection of Trandafirilor St. and the bypass route. A link of approx. 2km will be set-up branching out from this road junction, which will connect the Timisoara - Moravita highway bypass route.

The route crosses Timis River and ROSPA0128 Lunca Timișului, and then it runs towards South, between Jebel and Iosif localities, it crosses CF920 Jebel - Liebling and DJ693B, Vana Mare River and Tofani Valley. The route continues on South direction, crossing hilly areas with agricultural land crossed by water flows, it runs across DJ 592B on the West of Folea, then CF922 Reșița - Timișoara and DN 58B. On the East side, it runs by the water treatment plant of Voiteg locality and Agro Nevada company, it reaches the East of Opatita locality, after which it runs towards South, on the West side of Brestea locality, at 200 meters away from the built-up area. From here on, the route continues towards South, crossing Bardeanca River and then carries on, also towards South, almost parallel with DN59 and CF922, bypassing Brestea locality on the East side, where it crosses DJ 588A, and then it heads off towards Stamura Germana locality.

From here on, the route continues towards South, between Dejan at NE and Moravita at SW, at approx. 700 meters away from the built-up area; it crosses DN 57 and reaches the border with Serbia, at approx. 1.55 km East from the border crossing point existing on DN 59. The connection with the Serbian side of the highway is going to be established, by setting up a new border crossing point.

**Rationale for location of proposed activity (e.g. socio-economic, physical-geographic basis)**

Several alternatives were analyzed during the phase of the Pre-feasibility Study developed in 2021, the optimal option being selected based on an analysis performed from a technical, financial, socio-economic and environmental point of view. In the framework of the pre-feasibility study, 6 route options were analyzed in the first stage, and later on, in the 2<sup>nd</sup> stage of the assessment, there were three main options concluded for establishing the highway corridor.

Due to the fact that the traffic values differ depending on the sector, the technical category was established on the grounds of a comparative assessment of the alignment identified as optimum alternative, Alternative 5b, for which it was applied a highway profile (5b1), a step-by-step highway (5b2), express road (5b3), step-by-step express road with bypass alternatives (5b4) and a step-by-step express road (5b5).

**Time-frame for proposed activity (e.g. start and duration of construction and operation)**

The estimate implementation schedule for the submitted Project is approx. 30 months. The Figure below presents the indicative timeline of the works.

1. Management sites set-up - 1 month;
2. Environment protection arrangements - 18 months
3. Earthworks - 23 months
4. Road superstructure - 22 months
5. Road junctions - 15 months
6. Facilities - 15 months
7. Water drainage works - 21 months
8. Hydro-technical works - 12 months
9. Road guard - 10 months
10. Bridges and passageways - 21 months

- 11. Footbridges - 21 months
- 12. Signs and marking - 6 months
- 13. Temporary works - 23 months

Grafic orientativ de realizare a investiției																																	
Nr.Crt	Activitatea	Durata (luni)	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	L21	L22	L23	L24	L25	L26	L27	L28	L29	L30	
			1	Organizarea de sanber	1																												
2	Amplasari pentru protectia medului	18																															
3	Terasamente	23																															
4	Suprastructura drum	22																															
5	Hodun rubere	15																															
6	Dotari	15																															
7	Dispozitive de scurgere a apelor	21																															
8	Lucrari hidrotehnice	12																															
8	Parapeți	10																															
9	Poduri si pasaje	21																															
10	Podete	21																															
11	Semnalizare si marcaje	6																															
12	Lucrari provizorii	23																															

**Maps and other pictorial documents connected with the information on the proposed activity**

**Additional information/comments**

Additional information can be found in the attached memoir.

**Information on expected environmental impacts and proposed mitigation measures**

**Scope of assessment (e.g. consideration of: cumulative impacts, evaluation of alternatives, sustainable development issues, impact of peripheral activities, etc.)**

In the case of the majority of the identified forms of impact, the observed effects can occur to distances of up to 1 km, at most. The greatest distance to which the effects of the project can be experienced during the construction phase is generated by noise (increase in the equivalent level of noise) and air quality (increase in the level of particulates), these being spatially and temporally restricted effects. During the operation phase, the potential negative impact of the project will be mainly the noise and vibrations generated by the traffic of vehicles. The project has the potential to fragment the habitats of wild fauna species, an impact that can be encountered at distance of kilometres from the axis of the project, in the situation where appropriate measures will not be adopted.

The assessment of the Project's likely impact on the biodiversity component related to the Natura 2000 sites was analyzed in relation to the Specific Conservation Objectives established for the sites. In order to comply with the requirements regarding the assessment of likely cumulative impact and to make sure that the entire highway project is assessed, the analysis of the likely impact on biodiversity was conducted taking into account the entire project.

**The size and complexity of the impact**

Timișoara – Moravița Highway will have the potential to generate various forms of likely impact on many components of the environment. The main components on which the Project is likely to generate impact are:

**The impact on the population and human health**

The highway will be built on the territory of the following administrative-territorial units (within and outside the built-up area): UAT Remetea Mare, UAT Recaș, UAT Bucovăț, UAT Moșnița Nouă, UAT Giroc, UAT Sacoșu Turcesc, UAT Pădureni, UAT Liebling, UAT Jebel, UAT Voiteg, UAT Birda, UAT Deta, UAT Denta, UAT Moravița. During the construction phase of the highway, the above mentioned UATs will be crossed by vehicles transporting materials and workers.

The main sources of impact on human settlements and other constructions of public concern, occurring during the highway construction phase, are:

- the noise and vibrations generated by the construction works;
- emissions and dust generated during the construction works and traffic of the equipment and vehicles;
- construction site/production base specific activities;



- uncontrolled storage of waste and materials.

The released pollutants don't have cumulative character and they come from mobile sources; they are dispersed as their source travels.

The impact on the population generated during the construction phase will be direct, negligible negative, limited as duration, lasting only while the construction works are performed, and it will have a small magnitude.

#### **The impact on biodiversity, the natural habitats and wildlife**

The Project will cross natural protected areas and it is subject to the provisions of the GUO no. 57/2007 on the regime of natural protected areas and conservation of natural habitats and wildlife, with further amendments and completions (which transposes the Habitats and Birds Directives into national legislation), having the potential to impact the intersected natural protected areas and those in the vicinity.

The impact on biodiversity could be estimated as having:

- **Likely significant impact due to the affected ecological connectivity from the area**
- **Likely significant impact, due to the increased level of the noise.** This impact may be able to manifest especially on the nesting bird species, in case that appropriate measures will not be adopted.

The likely biodiversity impact of the Project could occur differently, according to the phase of the Project. The impact assessment was carried out on the grounds of the Site Specific Conservation Objectives, in compliance with the provisions of the Memo issued by the Ministry of Environment, Waters and Forests no. 4654/02.07.2020. The details regarding the identified likely impact are included in Annex 3 – OSC assessment tables attached to the Memorandum.

#### **Impact on the land and soil**

The main negative and direct impact on the soil, occurring during the construction phase, is due to the soil masses handling works (soil stripping, excavation, stockpiling) taking place on the surfaces which will be covered by temporary constructions related to the construction site management, but especially by the constructions which will occupy the soil surface permanently: the main infrastructure components of the highway route.

The most important impact on the soil is represented by the definitive occupation of the land required for the construction of the highway.

Upon completion of the works, the land which was temporarily covered by constructions will be rehabilitated and returned to its original use.

During the operation of the highway, the main form of impact is generated by the traffic taking place on it.

Sources of soil pollution can also be represented by uncontrolled waste storages, impure water discharges in the immediate vicinity of the roadway.

Indirectly, there will be a series of pollutants reaching the soil near the highway, generating specific assimilation processes in plant organisms.

It is estimated that during the operation phase there will be concentrations of air polluting substances, which end up settling down on the ground, without exceeding the threshold values. We therefore estimate that there will not be a significant negative impact on the soil, as a result of the traffic, given the conditions of a flowing traffic, without significant speed variations.

#### **The impact on air quality**

The air polluting emissions will be generated through the works required for performing the entire process of construction, starting from digging and excavations, and continuing with the filling works, construction of the road system and structural works.

The area of the work fronts will represent the most important source of emissions, because it cumulates the activity of several pollutants.

The construction works will also include numerous mobile sources represented by the equipment necessary for land arrangement and construction works, the vehicles that will ensure the transport of the construction materials, as well as the supply of materials required for the construction works, and the vehicles transporting

the waste off the site.

Their operation will be intermittent, depending on the work schedule and the timeline of the operations. The works related to the project will be carried out with modern equipment (excavator, bulldozer, loader, drilling rig, etc.).

Most of the emission sources of air pollutants are ground sources (except for the structural works located at higher level from the ground), free, open and mobile or diffused/directed stationary.

During the operation phase, there are no facilities designed to retain and disperse the air pollutants. The sound-absorbing panels will influence the air dispersion of the pollutants released from the road vehicles that will travel on the highway, encouraging the vertical dispersion. Also, landscaping will have a positive role in confining the air pollutants.

It is estimated that the impact on the air environment factor is moderate negative.

#### **The impact on water quality**

The main sources of pollution or pressure occurring during the construction phase in relation with the waters will be represented by hydro-morphological alteration of the surface waters, especially in the area of hydro-technical structures, such as bridges, footbridges, passageways.

- the construction of the structural works can generate changes in the hydro-morphological and qualitative parameters of the watercourses where works are carried out;
- soil handling works, generating soil particles that can reach the surface waters.
- traffic from the construction site to and from the work fronts or the areas from where the construction materials are brought (quarries, ballast sites);
- accidental spills of chemicals, fuels and oils from the operation of the equipment involved in construction works or due to faulty handling of transport vehicles;
- improper handling and use or storage of the materials used in the execution of the works (concrete, earth, aggregates, etc.), which can reach the surface waters by entrainment by rainwater;

During the operation phase:

The main source of pollution occurring during the operation phase in relation with the water is represented by the rainwater washing off and entraining solid particles and other soluble compounds settled on the embankment (heavy metals, hydrocarbons, etc.), being taken over and transported towards the drainage system of the express road.

Another source of water pollution is represented by the rainwater washing off and entrainment the snow removal substances: (salt (NaCl) and calcium chloride (CaCl<sub>2</sub>)).

The assessment of the Project's works impact on the surface water environment component, performed from the perspective of the impact parameters, emphasises the following aspects:

**The form of impact** on the surface water is negative, both during the construction phase and operation phase, for all works related to the Project.

**The impact forms presented above will be generated only on the territory of Romania.**

#### **Likelihood of the impact**

All previously mentioned forms of impact have a high occurrence likelihood. The uncertainties relate strictly to the size of the impact. The impact occurrence likelihood is low only for the case of polluting substances spillage on the soil or water flows; these events could occur on accidental basis.

In order to avoid certain forms of significant impact, it is necessary to implement a plan of measures and monitoring:

- Draft up and implement suitable measures to avoid/mitigate the impact;
- Evaluate the efficiency of the implemented measures (monitoring, impact assessment upon the completion of the construction and during the first years of operation);

- Implement certain additional measures if the already implemented measures are not able to remove the occurrence of significant impact.

**Duration, rate and reversibility of the impact**

The forms of impact related to the construction phase begin once the triggering activity begins. The duration for which the impact specific to the construction phase will manifest will not exceed the 30 months, the time-frame designed for the completion of this phase, with the exception of the impact on the soil and possible habitat loss, which represent permanent forms of impact. The duration of construction works in the vicinity of the border is much shorter. The impact is manifested on human settlements and terrestrial ecosystems depending on the work fronts activity, mostly generated by the increase in the noise level and the presence of work teams.

In terms of water quality potential impact, there was identified that the impact generating events are limited to the riverbed areas related to specific works.

In the case of the potential impact on air quality, its manifestation can be recorded far from the source, depending on the meteorological conditions that dictate the direction of the wind and the dispersion capacity of the pollutants.

The likely impact occurring during the operation phase in relation with human settlements and biodiversity components is permanent and it depends on the traffic volume. On the territory of Serbia, there are no inhabited areas in the vicinity of the project site (the minimum distance from inhabited areas is 1.5 km).

As far as the likely impact on water quality is concerned, this is unlikely to occur while implementing the best methods and practices regarding the maintenance of bridges and passageways, but also of the pre-treatment facilities provided at the discharge points of rainwater in natural emissaries.

All forms of impact can be reversible (at different time scales) with the exception of the habitat loss occurring as a result of its occupation with permanent constructions. The project will not cause loss of habitats on the territory of Serbia.

***Measures to avoid, mitigate or reduce the significant environment impact***

The requirement of additional measures necessary to mitigate and avoid the impact will be analysed within the Appropriate Assessment Report (EA) and Environment impact assessment report (RIM) (i.e. sound-absorbing panels, under-crossing constructions designed for fauna, etc.).

**Transboundary aspect of the impact**

Timișoara – Moravița Highway is going to provide the connection with the highway existing on the Serbian side, by setting up a new border crossing point. Thus, all works taking place near the Serbian border have the potential to pose a potential transboundary impact, localized to proximity of the project footprint, direct related from timeline extension to the project execution work plan, but this impact will be manifested locally (in the area of the work fronts), without significantly affecting the environment in Serbia.

**Description of the environment impact generated by the management site works**

The likely impact generated by setting up the management site could be:

- Temporary occupation of the land. The impact is direct and temporary (occurring during the construction phase of the work). The temporarily occupied land will be brought down to the minimum;
- The impact on the environment factors (water, air, soil) could be estimated as being direct/indirect, depending on the pollutant's nature and local occurrence. The size of the impact is low;
- The noise pollution is direct, depending on the location of the dwellings from the management site, and local;
- The flora and fauna in the proximity of the management site could be affected by the vegetation clearing works, sound pollution, emissions and eventual improper storage of waste and materials. The

impact is appreciated as being low, direct, for short time, temporary and local, due to the proposed location;

- Hiring local labour will generate a positive, direct and local impact.

Site organizations will be located exclusively on the territory of Romania.

**Expected environmental impacts of proposed activity (e.g. types, locations, magnitudes)**

**Inputs (e.g. raw material, power sources, etc.)**

The main natural resources used for the construction of the highway are water, soil and mineral aggregates (natural stone, ballast, sand). The mineral aggregates are available to purchase from the existing quarries/ballast sites in the area of the project site.

The transport of aggregates from quarries and/or ballast sites to the project site area will be carried out with specific vehicles on national and/or local roads, as the case may be. Front-end loaders will also be used for transport operations within the construction sites/work-points.

The supply of materials will be carried out gradually, on construction stages, so that they are used right away and long-term storage of raw materials is avoided.

**Raw materials and construction materials required for the implementation of the Project, along with their estimative quantities**

Item no.	Raw materials and construction materials	M.U.	Estimate Qty.
1	Hydrocarbon pavement mixture	ton	691,496
2	Natural aggregates stabilized with cement	c.m.	467,738
3	Ballast	c.m.	1,008,790
4	Rolled asphalt	s.m.	1,790,100
5	Stabilized soil layer	c.m.	413,100
6	Topsoil	c.m.	950,130
7	Concrete	c.m.	347,058
8	Cement	tone	121,470
9	Water	c.m.	104,117
10	Reinforcement	ton	26,783
11	Petrol	ton	8,676,456
12	Lubricants	ton	34,706

The concrete and hydrocarbon pavement mixture will be prepared within the asphalt and concrete stations located within the construction management site, on Romania's territory.

The Project will require fuel (petrol) to carry out the transports and operate the equipment working on site to implement the proposed objectives during the construction phase. The fuel supply will be done outside the construction site; the fuel will be transported by truck tanks up to the fueling points established within the site.

The power supply of the constructions sites will be achieved through the existing power network and generating sets. The power required for the work fronts will be supplied from generating sets.

During the operations phase, the CIC, services spaces and short term car parking places will require water and power supplied to them. There will be various materials stored on the CIC's site during the regular maintenance works, such as anti-skid materials, paint and thinners.

During the operations phase, whenever the repair works will be needed, the operations and the raw materials used for their performance will be similar to those from the construction phase, but at a lower size and quantity.

**Connection to the utilities networks existing in the area**

The utilities required during the construction phase will be provided as follows:

- Water supply: the necessary technological water and that used for domestic purposes will be provided through connection to the network in the area, where it exists, or it will be provided by purchase from third parties and will be brought to the site with the help of car tankers. The drinking water needed by the staff will be purchased from the shops/water suppliers;

- Discharge of waste water: domestic waste water will be directed through the internal sewerage network to the existing networks or into emptying septic tanks, from where it will be loaded and transported to the existing treatment plants in the project area by companies authorized on the basis of concluded agreements. In the case of work fronts, ecological toilets will be provided in certain areas;
- The power supply of all the objectives related to the maintenance centre will be made from a transformer station, which will be provided by Electrica SA. The new transformer station will be connected to the supplier's network with a cable protected by copper conductors and XLPE insulation.
- Heating agent will be necessary exclusively for the management sites and will be supplied through thermal power plants.

**During the period of operation, it will be necessary to ensure the following utilities**

- The water supply will be provided in the CIC and the short-term parking places by building authorized drilled wells or by connecting to the water supply network in the area (if available);
- Evacuation of waste water: domestic waste water resulting from the CIC and the short-term parking places will be directed through the internal sewage network to the watertight emptying tanks proposed within the objectives. If the local conditions will allow it, the connection to the sewage networks of the neighbouring localities will be established.
- Rainwater collected on CIC sites and short-term parking places will be pre-treated by means of decanters and hydrocarbon separators. The rainwater collected from the road platform will be directed through the designed collection system into settling basins and hydrocarbon separators before discharge into the emissary. In areas where this water is not possible to be discharged into natural emissions, there will be retention basins provided;
- The electricity supply will be ensured by connection to the existing networks in the area of the sites;
- The thermal agent is needed in the CIC and in the short-term parking places, where it will be provided by means of thermal plants and electric heaters.

**Outputs (e.g. amounts and types of: emissions into the atmosphere, discharges into the water system, solid waste)**

**Transboundary impacts (e.g. types, locations, magnitudes)**

**Likelihood of the impact**

All previously mentioned forms of impact have a high occurrence likelihood. The uncertainties relate strictly to the size of the impact. The impact occurrence likelihood is low only for the case of polluting substances spillage on the soil or water flows; these events could occur on accidental basis. The impact on the environment in Serbia will be manifested locally, strictly in the area of the work fronts, the magnitude will be small.

In order to avoid certain forms of significant impact, it is necessary to implement a plan of measures and monitoring:

- Draft up and implement suitable measures to avoid/mitigate the impact;
- Evaluate the efficiency of the implemented measures (monitoring, impact assessment upon the completion of the construction and during the first years of operation);
- Implement certain additional measures if the already implemented measures are not able to remove the occurrence of significant impact.

**Duration, rate and reversibility of the impact**

The forms of impact related to the construction phase begin once the triggering activity begins. The duration for which the impact specific to the construction phase will manifest will not exceed the 30 months, the time-frame designed for the completion of this phase, with the exception of the impact on the soil and possible habitat loss, which represent permanent forms of impact. The impact is manifested on human settlements and terrestrial

ecosystems depending on the work fronts activity, mostly generated by the increase in the noise level and the presence of work teams. The impact on the environment in Serbia will be manifested locally, strictly in the area of the work fronts, the magnitude will be small. On the territory of Serbia, in the vicinity of the project site there are no inhabited areas (the minimum distance from inhabited areas is 1.5 km), natural protected areas (the minimum distance from the areas is 12 km).

In terms of water quality potential impact, there was identified that the impact generating events are limited to the riverbed areas related to specific works. But these forms of impact will be manifested only on the territory of Romania because no works will be carried out on the territory of Serbia in the area of water bodies. The minimum distance between the site of the works in Romania and the minor bed of water bodies in Serbia is 800 m.

In the case of the potential impact on air quality, its manifestation can be recorded far from the source, depending on the meteorological conditions that dictate the direction of the wind and the dispersion capacity of the pollutants. But considering the magnitude of the works in the border area with Serbia, there will be no significant impact on air quality in Serbia.

The likely impact occurring during the operation phase in relation with human settlements and biodiversity components is permanent and it depends on the traffic volume. Conversely, the probability of these forms of impact on human settlements and biodiversity in Serbia is very low considering the distance between their boundaries and the project location.

As far as the likely impact on water quality is concerned, this is unlikely to occur while implementing the best methods and practices regarding the maintenance of bridges and passageways, but also of the pre-treatment facilities provided at the discharge points of rainwater in natural emissaries.

All forms of impact can be reversible (at different time scales) with the exception of the habitat loss occurring as a result of its occupation with permanent constructions.

***Measures to avoid, mitigate or reduce the significant environment impact***

The requirement of additional measures necessary to mitigate and avoid the impact will be analysed within the Appropriate Assessment (EA) and Environmental impact report (RIM) (i.e. sound-absorbing panels, under-crossing constructions designed for fauna, etc.).

***Transboundary aspect of the impact***

Timișoara – Moravița Highway is going to provide the connection with the highway existing on the Serbian side, by setting up a new border crossing point. Thus, all works taking place near the Serbian border have the potential to pose a potential transboundary impact, localized to proximity of the project footprint, direct related from timeline extension to the project execution work plan. The duration of the execution of works in the border area with Serbia is limited.

**Proposed mitigation measures (e.g. if known, mitigation measures to prevent, eliminate, minimize, compensate for environmental effects)**

**Environment protection works**

The scope of the environment protection works is:

- To avoid and mitigate the Project's impact on biodiversity (both within the protected natural areas, as well as outside of them);
- Reduce the Project's impact on the air quality;
- Avoid and reduce the Project's impact on the waters' status;
- Mitigate the Project's impact on soil quality;
- Avoid and reduce the Project's impact on the population's health;
- Reduce the Project's impact on the landscape.

The main types of environment protection works that will be carried out within the Project, are represented by:

- Sound-absorbing panels, both for protection of the inhabited areas, as well as for the protection of the

natural areas;

- Anti-collision panels of whose role is to reduce the collision risk of the flying fauna species with road traffic;
- Under and above ground crossings set-up for the fauna species, to provide a proper level of permeability for the infrastructure;
- Protection fence to prevent fauna species from entering the roadway along the entire length of the highway and on both sides of it;
- Suitable pretreatment/treatment facilities for collected rainwater, as well as for domestic wastewater generated from the services areas, parking places and the maintenance and coordination centres;

In the vicinity of the project site, on the territory of Serbia, there are no natural protected areas. The minimum distance to the natural protected areas from Serbia is 12 km, to the border RS0000017 VRSACKE PLANINE.

#### **Sound-absorbing panels**

In order to reduce the level of noise generated by the construction works and by the road traffic taking place on the highway, the project established the installation of sound-absorbing panels. These will be mainly located in the locality areas, but also within fauna sensitive areas. The location of the sound-absorbing panels will be finalized following the assessment of the outcome of the noise modeling, which must be issued within the Environmental Impact Assessment Report. The minimum distance between the project site and inhabited areas in Serbia is 1,500 m, therefore it is not necessary to install sound-absorbing panels on the territory of Serbia.

There will be mobile panels used during the construction phase; they will be installed at the level of the working fronts, especially in areas with high sensitivity (protected natural areas, connectivity/permeability areas for protected fauna species, inhabited areas).

#### **Anti-collision panels**

In order to avoid the collision of the fauna with the car traffic taking place during the operating phase, the project will establish anti-collision panels that will be placed within biodiversity sensitive locations. The main targeted locations are those at the intersection or adjacent to the Bird Protection Special Areas or Sites of Community Relevance. The locations of the anti-collision panels will be finalized following the assessment of the mortality risk of the species, necessary to be carried out within the Appropriate Assessment, if this would be necessary.

Given the fact that the minimum distance between the project site and the natural protected areas on the territory of Serbia is 12 km, it is not necessary to mount anti-collision panels on the territory of Serbia.

#### **Landscaping works**

The landscaping project will include the following operations:

- removal and stockpiling the topsoil;
- covering all unexposed slopes of all embankments with earth and planting grass species and shrubs;
- restoration of the areas affected by the works (service roads, storage and stockpiling areas, etc.), by covering them with soil and planting appropriate grass species and shrubs;
- planting shrubs. The type of shrubs that will be used will be chosen so as to correspond to the height of the embankment of the adjacent road;
- all plant species that will be used for landscaping will be characteristic of the area;
- the stripped topsoil will be stockpiled for future use to cover the soil excavation areas and the embankments, and to rearrange the areas affected by the works.

The basic fund of the landscaping consists of seeding and grassing. Covering the green spaces near the roadway, the grassy surfaces, in addition to the role of soil stabilizer, they also constitute the foundation on which the shrub vegetation is created.

#### **Constructions for water pretreatment**

<p>The following water treatment constructions are designed for the protection of the soil and water quality:</p> <ul style="list-style-type: none"> <li>• Sedimentation tanks;</li> <li>• Fat and oil separators;</li> <li>• Retention basins.</li> </ul> <p>The number of these constructions was established taking into consideration the water basins of the area. The Project includes the construction of 42 retention basins, 215 hydrocarbon separators and 174 sedimentation tanks.</p> <p><b>Crossings set-up for fauna</b></p> <p>To ensure permeability for fauna species, the Project included the construction of undercrossing structures for this purpose. The bridges that cross over the watercourses, but also those designed to cross over forest or field roads provide a double functionality, so they can also be used as passageways for the fauna.</p> <p>Thus, the Project ensures the following types of structures that are able to provide such double functionality:</p> <ul style="list-style-type: none"> <li>• Footbridges;</li> <li>• Bridges;</li> <li>• Passageways.</li> </ul> <p>A number of 135 slabbed footbridges are designed within the highway project, out of which 47 on the road junctions and 6 on temporary roads; 13 bridges on the highway, 4 on road junctions and 1 on temporary roads; 9 passageways on the highway, 4 on road junctions and 15 on other roads.</p> <p><b>Additional information/comments</b></p> <p>Additional information can be found in the attached memoir.</p>	
<b>(iv) Proponent/developer</b>	
<p>National Company for Road Infrastructure Administration          38 Dinicu Golescu Blvd, District 1, Bucharest, 010873, Romania          Phone no.: 004 021.264.32.00, fax: 004 021.312.09.84          E-mail: office@andnet.ro, Web: www.cnadnr.ro          Legal representative: Cristian PISTOL - Managing Director:          In-charge with environment protection: Ecaterina MUSCALU – Head of Environment Department          Engineering works: Joint work of Search Corporation S.R.L. – Egis România S.A. – Egis International SAS          Presentation Memoir issued by: Total Business Land S.R.L.</p>	
<b>(v) EIA documentation</b>	
Is the EIA documentation (e.g. EIA report or EIS) included in the notification?	No
<p>No. The presentation memoir is attached to this notification. This documentation describes the purpose of the activity, the main objectives, the impact on environmental factors, including in a cross-border context, the proposed measures to reduce / eliminate the impact on each potentially affected environmental factor. The EIA documentation will be developed in approximately 3 months.</p>	
<b>If no/partial, description of additional documentation to be forwarded and (approximate) date(s) when documentation will be available</b>	The EIA Report will be available in about 3 months.
<b>Additional information/comments</b>	
Additional information can be found in the attached presentation memoir.	
<b>2. POINTS OF CONTACT</b>	
<b>(i) Points of contact for the possible affected Party or Parties</b>	



<p>Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix)</p> <p>Republic of Serbia                  Ministry of Environmental Protection                  Youth Brigades 1                  11070 New Belgrade                  +381 11 31 31 356</p> <p>Point of Contact                  Mr. Slobodan SREMCEVIC                  Independent Advisor                  Ministry of Environmental Protection                  1 Omladinskih Brigada Str.                  11070 BELGRADE                  Telephone: +381 11 313 25 72                  E-mail: <a href="mailto:slobodan.sremcevic@ekologija.gov.rs">slobodan.sremcevic@ekologija.gov.rs</a></p> <p>Focal Point                  Mr. Zoran VELJKOVIC                  Head of Section for EIA of Projects and Activities                  Ministry of Environmental Protection                  1 Omladinskih Brigada Str.                  11070 BELGRADE                  Telephone: +381 11 3131 356                  E-mail: <a href="mailto:zoran.veljkovic@eko.gov.rs">zoran.veljkovic@eko.gov.rs</a></p>	
<p>List of affected Parties to which notification is being sent</p>	<p>Republic of Serbia</p>
<p><b>(ii) Points of contact for the Party of origin</b></p>	
<p>Authority responsible for coordinating activities relating to the EIA (refer to decision I/3, appendix)</p> <p>MINISTRY OF THE ENVIRONMENT, WATERS AND FORESTS                  GENERAL DIRECTORATE FOR IMPACT ASSESSMENT, POLLUTION CONTROL AND CLIMATE CHANGE                  12 Libertății Boulevard, 5 District, Bucharest, Romania -040129                  Phone: +4021.408.9588;                  e-mail: <a href="mailto:registratura@mmediu.ro">registratura@mmediu.ro</a></p> <p>Focal point                  Dorina MOCANU                  General Director                  General Directorate for Impact Assessment, Pollution Control and Climate Change                  E-mail: <a href="mailto:dorina.mocanu@mmediu.ro">dorina.mocanu@mmediu.ro</a></p>	
<p>Decision-making authority if different than authority responsible for coordinating activities relating to the EIA</p>	

<p><b>TIMIȘ ENVIRONMENTAL PROTECTION AGENCY</b>                  Liviu Rebreanu Boulevard, no. 18-18A, Timișoara, Timiș County, cod 300210                  Phone: 004 0256.491.795                  Fax: 004 0256.201.005                  E-mail: office@apmtm.anpm.ro                  Web site: <a href="http://apmtm.anpm.ro">http://apmtm.anpm.ro</a></p> <p>Timiș Environmental Protection Agency is the competent authority for issuing the environmental agreement.</p>	
<p><b>3. INFORMATION ON THE EIA PROCESS IN THE COUNTRY WHERE THE PROPOSED ACTIVITY IS LOCATED</b></p>	
<p><b>(i) Information on the EIA process that will be applied to the proposed activity</b></p>	
<p><b>Estimated Time schedule</b>                  Romania has the legislation on environmental impact assessment (EIA) fully aligned with EU, and the procedure for evaluating the impact on environment for any project (public or private) integrates, as appropriate, the appropriate assessment of protected natural areas of Community interest, conservation of natural habitats, wild flora and fauna. In order to ensure the special measures of protection and conservation in situ of the assets of the natural heritage, a differentiated regime of protection, conservation and use is established, according to the defined categories of natural protected areas – this include areas of community interest or „Natura 2000” sites, which are sites of community importance, special areas of conservation, special protection area (avifauna’s protection).</p> <p>The accomplishment of full EIA on which basis the environmental agreement would be issued, is mandatory for all activities listed in Appendix I of the Law no. 292/2018 on the framework procedure for environmental impact assessment for certain public and private projects, as well as all projects proposed for the coastal zone and those proposed in protected hydro-geological areas. Projects listed in Appendix II of the same normative act, projects proposed within a natural protected area and those designated for the management of the natural protected areas are subject to the screening procedure. The result of the screening procedure is a decision based on which the project is further subject to the EIA or not. The current regulations require that the information provided by the developer of the EIA process shall include the measures envisaged in order to avoid, reduce and where possible, offset the significant adverse effects. Starting with 2019, the environmental impact assessment for certain public and private projects is governed by Law no. 292/2018. The environmental impact assessment procedure also includes the appropriate assessment procedure (referring to the projects’effects on habitats and species of community interest). The applicable environmental impact assessment legislation for the proposed investments is the legislation in force at the time the project holder notifies the environmental protection agency on its intention to carry it out. The EIA procedure comprises a mandatory involvement of the public and the public authorities with environmental protection responsibilities. The public comments are taken into account in the EIA procedure. The public authorities with environmental protection responsibilities are always involved in the Technical Review Committee-which is mandatory required by the national EIA procedure. The national EIA procedure is detailed within Law 292/2018. The national EIA procedure is applied also using the guidance of the MO, as appropriate, on the requirements of the MO 864/2002 on the transboundary EIA procedure and of MO 19/2010 on the approval of the methodological</p>	<p>4 to 6 months from the EIA documentation submission</p>

guide regarding the appropriate assessment of potential effects of plans or projects on protected natural areas of community interest.

Natura 2000 network is the major outcome of European Union (EU) policies on biodiversity and is designed to protect species and habitats in accordance with the EU Habitats Directive (92/43/EEC 1992) and EU Birds Directive (2009/147/EC 2009). As EU member country, Romania set up Natura 2000 network which is covering about 23% from national territory. Each Member State has the authority to choose specific conservation measures aiming at achieving and maintaining a favorable conservation status of species and habitats consequently, the degree of protection may vary from site to site. Presently, there are territorial administrative units (communes) in Romania completely or partially included in a Natura 2000 site. These deemed the need to implement environmental impact assessments before applying for development projects. For all the activities carried out in the perimeter and in the vicinity of the protected natural area, it is compulsory to respect the provisions of the management plans and the regulations elaborated and approved.

In conclusion, Romania has the legislation on environmental impact assessment (EIA) fully aligned with EU, and the procedure for evaluating the impact on environment for any project (public or private) integrates, as appropriate, the appropriate assessment of protected natural areas of Community interest, conservation of natural habitats, wild flora and fauna. In order to ensure the special measures of protection and conservation in situ of the assets of the natural heritage, a differentiated regime of protection, conservation and use is established, according to the defined categories of protected natural areas – this include areas of community interest or "Natura 2000" sites, which are sites of community importance, special areas of conservation, special protection area (avifauna's protection).

The measures provided for in the management plans of the protected natural areas are elaborated in such a way as to consider the economic, social and cultural conditions of the local communities, as well as the regional and local particularities of the area, but having priority of the management objectives of the protected natural area. LAW no. 292 / 2018 on the assessment of the impact of certain public and private projects on the environment regulates the transposition of Directive 2014/52 / EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92 / EU on the assessment of the effects of certain public and private projects on the environment. According to the law, the environmental impact assessment procedure integrates, as appropriate, appropriate assessment of protected natural areas of Community interest, conservation of natural habitats, wild flora and fauna, as well as assessment of possible industrial emissions effects and major accident hazards which are dangerous substances involved.

The environmental impact assessment procedure for water-based or water-related projects shall be conducted in conjunction with the water management permits procedure including the assessment of impacts on water bodies. The National Agency for Protected Natural Areas was granted in November 2018 responsibility to manage Natura 2000 sites in Romania. Most of the Natura 2000 sites have not been allocated specific local custodian at the district level. Similarly, no specific budget for management of the Natura 2000 sites was allocated. Some of the proposed sub-projects are subject to the provision of art. 28 from the Government's Emergency Ordinance no. 57/2007 regarding the status of protected natural areas, conservation of natural habitats and of wild flora and fauna, as amended, as the investment site locations are included in the Natura 2000 sites. Not all Natura 2000 sites where the proposed investments project's

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<p>new are included have an approved management plan.</p> <p>The project „Autostrada Timișoara - Moravița" went through the screening stage within the environmental impact assessment procedure, through which the appropriate assessment study and the environmental impact report were requested. In the next period, the environmental studies will be carried out and the public debate session will be organized.</p>	
<p><b>Opportunities for the affected Party or Parties to be involved in the EIA process</b></p> <p>The affected party may participate in decision-making in the procedure as follows:</p> <ul style="list-style-type: none"> <li>- Following the notification, the affected party can take the decision to participate in the decision-making in the impact assessment procedure and can submit comments and observations that will be taken into account in the EIA documentation;</li> <li>- After receiving the EIA documentation, the affected party is invited to submit comments/opinions on the documentation;</li> </ul> <p>If necessary, later the authorities of the affected party will be consulted, in accordance with the provisions of art. 5 of the Espoo Convention.</p>	
<p><b>Opportunities for the affected Party or Parties to review and comment on the notification and the EIA documentation</b></p> <p>Comments are expected on the notification, if the notified party decides to participate in the EIA procedure.</p> <p>The Republic of Serbia is invited to also transmit information on the state of the environment that may be significantly affected, necessary for the preparation of the EIA documentation</p>	
<p><b>Nature and timing of the possible decision</b></p> <p>The decision that might be taken is to issue the environmental agreement and the construction authorization for this project</p>	
<p><b>Process for approval of the proposed activity</b></p> <p>The proposed activity will be approved by the construction authorization after the environmental agreement (final EIA decision) is issued by the environmental competent authorities.</p>	
<p>Additional information/comments</p>	
<p><b>4. INFORMATION ON THE PUBLIC PARTICIPATION PROCESS IN THE COUNTRY OF ORIGIN</b></p>	
<p><b>Public participation procedures</b></p> <p>In accordance with the provisions of Romanian legislation, the public participates in decision making during EIA procedure, as follows:</p> <ul style="list-style-type: none"> <li>-has a minimum of 30 days for submitting comments/observations to the EIA documentation in the procedural stages;</li> </ul>	

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<p>- within the public debate organized after the submission of the EIA report; the public has access to EIA documentation and may formulate comments/observations to it both before and during the public debate.</p>	
<p>Expected start and duration of public consultation</p> <p>After the EIA documentation is drawn up, the public has 30 days to express an opinion. Also, a public debate will be organized, announced at least 30 days before the date on which it takes place. If the affected Party deems it necessary, a public debate can also be held on its territory.</p>	
<p>Additional information/comments</p> <p>Contact persons within the Ministry of Environment, Waters and Forests – General Directorate for Impact Assessment, Pollution Control and Climate Change</p> <p>Anca – Maria APREUTESEI, head of the EIA Unit e-mail: anca.apreutesei@mmediu.ro</p> <p>Anamaria STANCIU, junior advisor e-mail: anamaria.stanciu@mmediu.ro</p> <p>tel.: 004 021 408 9588</p>	
<p><b>5. DEADLINE FOR RESPONSE</b></p>	
<p>Date</p> <p>A response is expected by 1.08.2023</p>	

