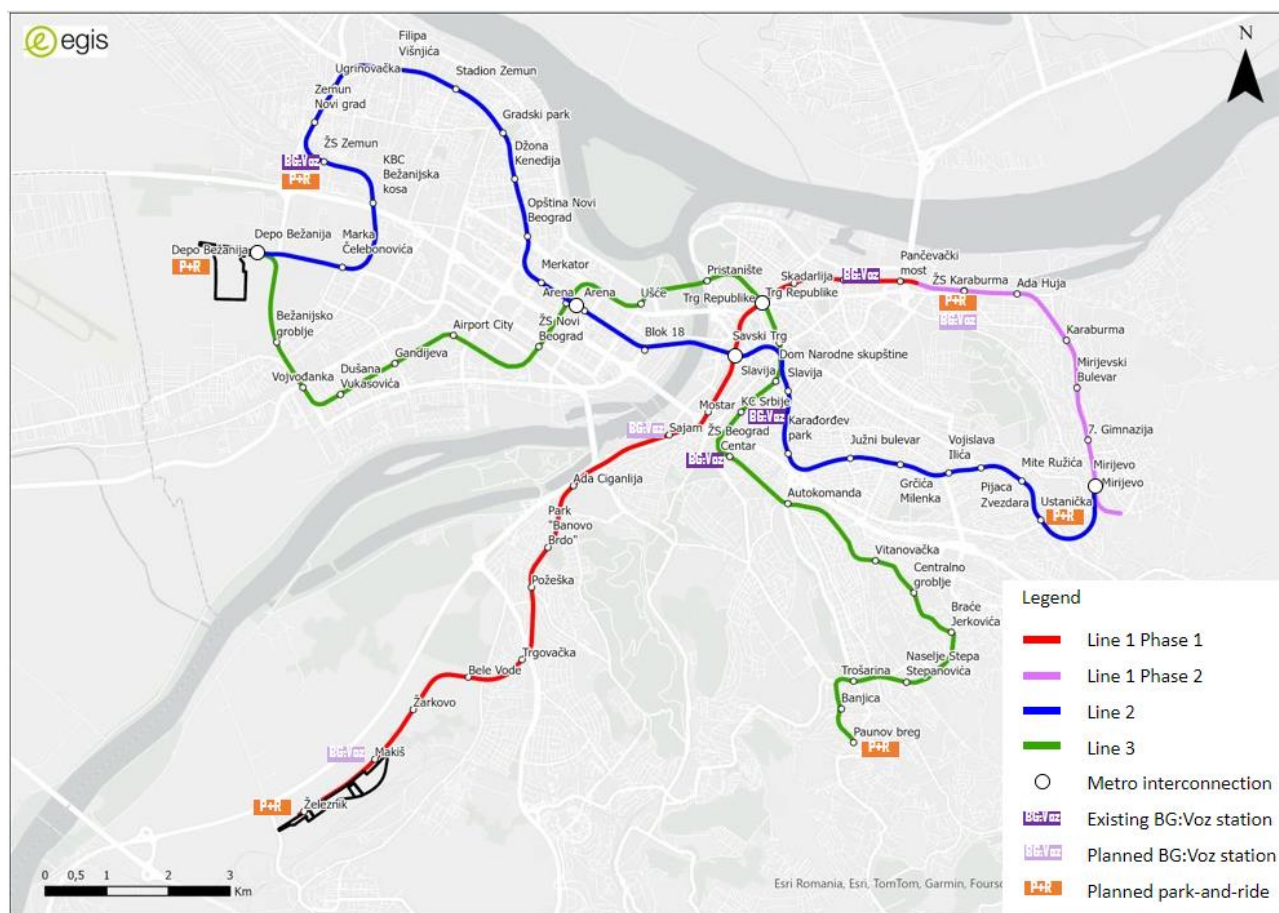


NON-TECHNICAL SUMMARY

LOCATION AND GENERAL PRESENTATION

The Metro Project of Belgrade, capital of Serbia, aims to improve the transport accessibility and mobility within the polycentric urban structure of the city.

In the long-term, the complete metro network composed of 3 lines and 62 stations is planned to be spread out over the territory of Belgrade. More specifically, L1 will comprise 21 stations (including 2 in common with L2).



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Commissioning of Line 1 (Železnik – Mirijevo) is planned in 2031 and of Line 2 (Mirijevo – Bežanija) in 2033. Line 3 is planned for 2036.

The subject of this specific Environmental and Social Impact Assessment is the Phase 1 of the Metro Line 1, extending from the Železnik station to the Pančevački Most station and creating a southwest to northeast axis, and its associated depot in Makis area.

REGULATORY FRAMEWORK AND METHODOLOGY OF IMPACT ANALYSIS

The ESIA is structured to meet relevant Serbian and EU/International substantive environmental standards. The ESIA is thus developed in accordance with the requirements of the IFC general and sectorial environmental and social safeguard policies and procedures (EHS Guidelines, Performance Standards on Environmental and Social Sustainability) and the international environmental protection and sustainable development guidelines, as a recognized international standard.

When Serbian regulations differ from EU/International substantive environmental standards, the Project will meet whichever is the more stringent.

Methodology of impact analysis, among other things, is based on reviewing following data:

- Spatial planning documents;
- Available reports upon the state of environment for the project location that have already been prepared;
- All available previously prepared documentation for the project location or project itself;
- Existing data on environmental conditions (geology and hydrogeology, water quality, soil, and atmospheric, bio-ecological data);
- Additional environmental and social surveys;
- Conceptual and preliminary design.

The document provides identification and detailed characterization of potential environmental and social (E&S) impacts, including beneficial (as well as adverse) impacts, and direct, indirect and/or cumulative impacts. The report includes all relevant stages of the Project's life (pre-construction, construction, operation, maintenance and decommissioning), and details how residual E&S impacts are estimated after application of the mitigation measures. For such estimation, a matrix of impact significance (scaled from 4 to 16) is settled by adding individual grades (scaled from 1 to 4) given for:

Magnitude - a scale of the severity / benefit of the impact is used to scientifically assess to which extent the impact affects the ecosystem (for ecological impacts) or the parties involved (for socio-economic impacts). This intensity is assessed both as part of the initial project and then as part of the amended project through the establishment of avoidance, reduction and / or compensation measures;

Spatial and temporal size of the impact - the spatial scale defines the physical extent of the impact; the time scale defines the duration of this impact;

Environmental sensitivity - a sensitivity scale makes it possible to evaluate whether the receiving environment has particular features (scarcity, high stakes use of resource, vulnerability, etc.) potentially reinforcing the importance of an impact in a given intensity. This sensitivity includes the notion of reversibility of the impact;

Likelihood - makes it possible to quantify whether the impact considered is certain (for example the loss of vegetation during earthly works including a waterproofed surface), possible, or exceptional (for example for certain accidents). Although some impacts may have important effects, a very low probability of occurrence may diminish the overall significance of this impact. Similarly, a frequent impact must be assessed as more significant than the same impact with a rare frequency of occurrence.

Sum of their grades gives the overall effect, according to the table below:

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Significance	Description	Evaluation
Low	An acceptable impact, which can require measures of avoidance or reduction, without that being essential. This impact is insufficient by itself, or even in combination with other impacts of similar importance; to call into question the project.	4-7 (green)
Moderate	A significant impact which requires measures of avoidance and/or reduction. This impact is insufficient alone to call into question the project, but could, in conjunction with other impacts of comparable nature, being a brake with its realization.	8-10 (yellow)
High	A serious impact which; if no measures are taken (and if this impact is negative), can call into question the project. This impact is considered by the company a major change and usually of long run of the environment (natural and/or socio- economic) with important consequences.	11-13 (orange)
Very high	A very serious impact which, so of measures are not taken (and if this impact is negative), can be enough in itself to call into question the project. This impact, doubtless permanent and irreversible; results for the sponsor in major consequences for the environment, the populations or the economic activity.	14-16 (red)

During the impact assessment, qualitatively, additional impact characteristics are taken into account - direction (positive, negative or mixed), reversibility, whether it is a direct (when a direct cause-and-effect relationship exists between a component of the project and an element of the environment - ecosystem or socio-economic components), indirect (which results from a direct impact or component of the project while continuing with a chain of consequence), cumulative (which results from a combination of impacts generated either by the project itself, or by the project and another project or another activity of the territory generating its own impacts) or residual (impact remaining after the application of avoidance and / or reduction measures) impact.

REASONS FOR PROJECT SELECTION AND DESCRIPTION OF THE CHOSEN PROJECT

Reasons for the choice of a metro solution

The existing public transport urban networks of Belgrade (bus, trolleybus and tram) are dense and provide high frequencies, but their operation in mixed traffic is quite inefficient. Although it accounts for a small percentage of the overall demand at present, the suburban BG:voz rail service is gaining importance since its opening in September 2010 and the City is committed to its further expansion following rehabilitation works to the tracks and stations.

A metro network, complementing the BG:voz network, is thus seen by the Masterplan of the Urban Transport Infrastructure of Belgrade as the missing piece of an integrated public transport system and plays a key role for the success of Belgrade's spatial development.

Description of the metro Line 1 Phase 1

As a whole, the Belgrade Metro will be inserted in an intermodal network of urban and interurban transports (bicycle, bus, tramway, train...) and will promote modal shift from private to public transports with the implementation of park-and-ride facilities in the vicinity of the metro stations.

More specifically, the first phase of Line 1 will have a connection with existing BG:voz lines in Pančevački most, and 2 stations will connect with future BG:voz lines. A park-and-ride facility will be located in the vicinity of the Železnik station. Finally, the planned development and reorganization of tram and bus lines will result in 2 bus terminals along the line (new hub in Železnik, reconstruction of a bus terminal in Pančevački most), 7 existing tramway stops and 3 additional planned tramway stops along the line.

Line 1 Phase 1 is approximately 15 km long and composed of 15 stations. It also comprises 10 shafts used for ventilation, evacuation and TBM insertion and extraction. The first phase also includes the main depot of the network which will be located in the area of Makiš field.

Line 1 Phase 1 of the metro is composed of 3 types of sections with different construction methods:

- At-grade section (tracks are located on the surface): A 2.1 km long at-grade section is designed for the entire depot area from the end of the line to Makiš station;

- Cut-and-cover section (shallow tunnel which requires excavation from the surface): A 1.9 km long section from Makiš depot to Bele Vode;

- Deep underground section (deep tunnel excavated below the surface by a Tunnel Boring Machine): The remaining length is designed as a TBM section, 11.2 km long from Bele Vode to Pančevački most.

Stations typology is adapted to the depth of the section:

- At-grade;

- Shallow underground with or without mezzanine;

- Deep underground with 2 mezzanines.

ENVIRONMENTAL AND SOCIAL STAKES OF THE STUDY AREA

A full study of the current state of the environment has been performed on the territory of Belgrade, combining bibliographical and onsite investigations. The main issues identified during this study are:

Socio-economic sensitivities:

- Land owners and agricultural activity in Makiš field.

- Residential areas, economic activities (gas station, shop, café, green market, car wash, workshop, restaurant...), access to public services (school, park, bus terminal...) in urban areas.

Interaction with public transports and road traffic in urban areas.

Dense public utilities networks in urban areas.

Air quality, soundscape and lighting ambiance of the concerned areas already show the characteristics of a urban or periurban areas, except in Makiš area (in general pollutant levels are characteristic of a rural background, noise levels are representative of a quiet area and there is a low level of light).

Interface with cultural heritage at Ada Ciganlija, Savski Trg and Trg Republike.

Risk of archeological finding in the city center around Trg Republike area.

Landscape stakes:

Project integration in the future Urban Development of Makiš area.

Urban integration of the stations in the urban areas (especially for Savski Trg, Trg Republike and Skadarlija / Bajloni Market project).

Geological and hydrogeological sensitivities:

Makiš area is located within Sanitary Protection Zone III for the protection of local groundwater (Belgrade water source). On the top of the aquifer presence of a low permeability layer that is partially protecting the groundwater.

Along the rest of the alignment, groundwater sensitivity is lower than in Makiš area. A direct connection between groundwater and surface water is likely to exist only in the project areas that are closer to the main rivers (Sava and Danube).

Presence of karstified layers locally for the sections on hills: potential presence of voids to be taken into account for project construction.

Shaft 2 located on a hill location with excavation works needed.

Potential climate change issues:

Alignment located within or close to the heat island from Ada Ciganlija station to Savski Trg station.

Road and rail corridors in the urban core of Belgrade: extreme cold, heavy precipitation and floods.

Streets in the urban core of Belgrade: heat wave, extreme cold, heavy precipitation and floods.

Topčiderska river: heavy precipitation and floods.

Areas highly vulnerable to floods along the Sava River and close to the city center along the Danube River.

Soil pollution challenges:

High concentrations of metals have been measured along the metro alignment and in the depot area (mostly Nickel, Copper, Zinc and Chromium).

Several potentially polluted sites are located along the alignment (gas stations, electrical transformer and Jugopetrol storage area).

Hydrological network challenges:

Local hydrological network to be rearranged by the PDR application in Makiš area.

Intersections along the alignment: Bočni canal (1-6) in the depot area, Pretraž canal (1-5) at the location of the future Žarkovo station and Canal B (1-7-4) in the vicinity of the location of the future Bele Vode station.

Major risks:

Flooding risks.

Proximity with 2 Seveso sites and location of parts of the alignment within their protection perimeters: production plants "Bele Vode" and "Makiš" located in the area of Makiš field (collection, purification and distribution of water).

Biodiversity sensitivities:

High level of challenge for some fauna species and their habitats, especially bird species, in Makiš area.

In urban areas, species with interest are located in the parks and garden.

PUBLIC CONSULTATION

Legally required public hearings were held in relation to relevant Project documents. Stakeholder meetings and a phone survey of persons residing within a radius of 1 km from the metro line were carried out.

Engagement will continue as part of the Belgrade Metro L1P1 ESIA development process and particularly when the document is prepared and can be presented to interested stakeholders, including civil society.

MAIN IMPACTS OF THE PROJECT AND ASSOCIATED MITIGATION MEASURES

Positive impacts are related to:

- Direct and indirect employment and procurement opportunities for project construction and its operation.

- Improved public transport and quality of life of citizens, leading to an increase in the amenity of certain neighborhoods both for residential and commercial use, and further leading to increased value of properties.

- Contributing to the reduction of greenhouse gas emissions, by enabling the modal shift of the use of private cars towards the public transport network.

Here below the main negative impacts (high and very high impact level) are described with associated mitigation measures.

Socio-Economic Aspects

The most severe socio economic impacts relate to physical displacement of households, some of which are likely to be vulnerable, as follows:

Permanent physical displacement, and accompanying economic displacement due to loss of gardens, of people residing in an estimated 20 informal structures, near the location of Shaft 02 and Bele Vode station.

Permanent physical displacement of people living in one, informally constructed, residential structure, in the location of the Old Sugar Factory Shaft and the acquisition of one additional non residential structure in that same location.

In the location of Shaft 10, where the TBM machines will be launched, loss of privately owned land with at least 20 structures (some formal and some informal), most of which are used for business (formal and informal economic activities), but also some residential buildings (with auxiliary structures), leading to physical and economic displacement. It should be noted that at least as many additional structures are located in the vicinity of this planned construction site. Having in mind the significant scale and duration of works in this location, especially due to the fact that

construction of L1P2 will also start in this location, in the opposite direction, it is likely that these structures will need to be acquired as well, expanding the number of people affected by physical and economic displacement.

The main Mitigation Measure consists of Developing and implementing a Resettlement Action Plan to address all physical and economic displacement caused by the Project and restore (if possible, improve) standards of living and livelihoods of all project affected people.

Vibration

Possible tactile discomfort for residential masonry buildings on the section from Shaft 2 to Pozeska station.

Depending on the selected track laying, possible hearing discomfort for residential concrete buildings and residential masonry building on the whole alignment except for Makis area.

The main Mitigation Measures consists of selecting the appropriate track laying to minimize the discomfort and keeping a high level of rail maintenance. N2 track laying is proposed on the majority of the alignment, while N3 track laying (higher performance) is proposed for:

- Some parts of the section from Shaft 2 to Pozeska station;

- The section including Park "Banovo Brdo";

- Some parts of the section including Shaft 4 and Ada Ciganlija.

Nevertheless, on the sections of points 1 and 2 here above a residual impact could persist. The following compensation measures are planned for such zones:

- Maintenance of railway rolling stock and equipment;

- Carrying out measurements during operational phase.

Landscape/Topography

The backfilling (raising the ground level from approximately 73 m.a.s.l. to 74.2-75.5 m.a.s.l.) and construction works of the depot will affect 34 ha of agricultural and natural land.

The main mitigation measures include:

- Installation of landscaped fences around the construction site to reduce the temporary visual impact;

- The work zones and temporary construction site installations will be marked out and maintained in a constant state of cleanliness (waste management, and cleaning of soiled roads if necessary);

- Green areas that are not within the perimeter of the backfilling (but in the vicinity of it) will be identified and carefully marked out to avoid unnecessary destruction of vegetation;

- The management of excavated and filling materials is the subject of specific studies defining in particular the possible storage locations, the transportation means and the management of the materials;

- The landscaping project for the depot buildings and outdoor area will reduce the visual impact of relief modification.

At grade and C&C sections, as well as each station entrance and shaft can have an impact on the local landscape.

The main Mitigation Measures include:

All shaft areas will be restored to their original state as much as possible after construction phase. Only superficial grids will be visible at ground level during operation phase, with the exception of Shaft 2, whose construction includes important excavation works on the West slope of Julino hill.

Stations will be integrated in their surrounding landscape. Urban integration for several station has been studied through an Architectural Competition.

Landscaping project is to be developed in accordance to Location Conditions.

At the site of the protected cultural monument "Sugar factory" and within the spatial cultural-historical site of exceptional importance "Topčider", it is planned to demolish a former warehouse for the construction of the Ada Ciganlija station, and to implant Shaft 04 at an extremity of the plot:

Above-ground parts of the Ada Ciganlija station that are not incorporated into the terrain (at ground level or 20 cm above ground level) should be designed within the building, in cooperation with the Republic Institute for the Protection of Cultural Monuments;

Above-ground openings of Shaft 04 should be designed in cooperation with the Republic Institute for the Protection of Cultural Monuments;

The demolished building will be rebuilt according to the specific conditions.

Soil, Subsoil and Groundwater

Potential soil/subsoil pollution due to inappropriate waste handling or accidental spill on the depot area as well as on at grade and C&C section in Makis during construction phase.

The main Mitigation Measures include the following:

Construction Environmental Management Plan (CEMP) shall include a specific emergency procedure in case of accidental spill;

Provide secondary containment and spill response equipment in case of accident;

Refuel vehicles and construction equipment at designated places outside Sanitary Protection Zone III perimeter;

Keep vehicles and equipment in good working condition to prevent oil and fuel leaks.

All of the buildings of the depot have foundations that reach below the protective layer: risk of transfer of pollution from the surface to the subsoil and groundwater related to piles installation. Therefore, the technical choice for the project shall prioritize the use of cast in situ concrete piles (very low permeability). Among the bored piles technique it is recommended to prioritize the one that uses bentonite drilling fluid in order to stabilize the borehole. Among the driven piles technique, the recommended one would be displacement piles (with a conical tip in case of tube.)

Risk of pollution of groundwater, which could affect the Belgrade water source quality and availability. During construction phase, this risk is related to accidental spillage of polluting products, fuel or oil leaks from construction equipment, concrete or other materials poured for the construction works, infiltration of polluted runoff water, etc. During operation phase, this risk is related to accidental leakage of polluting products or wastewater, the water used for washing of infrastructures and rolling stock.

The main Mitigation Measures include the following:

Parking of construction equipment in waterproof areas (no refueling facilities on site according to IDP filling).

Storage of pollutants in waterproof areas.

Equipment with anti-pollution kits.

Moreover, the runoff water of the construction site will be recovered in low point to be treated before being rejected into the public drainage network. The CEMP shall define the type of treatment needed and the appropriate equipment to be provided during construction.

On all plateaus where leakage of fluids is expected (diesel fuel, oil, chemicals, etc.), install suitable drains with drainage treatment in the sedimentation tank and/or separator of grease and oil, in accordance with the design solutions.

Store hazardous substances needed for the operation of machinery in dedicated storage areas (hazardous waste cabinet, spillage retention tray, etc.) to prevent any leakage in accordance with the regulations.

Drainage and wastewater (oily water separated collection and treatment). The network will be watertight, preventing water infiltration into the ground and thus protecting groundwater quality.

Wastewater collected during the operation phase will be discharged into the public drainage network, after verification of the quality thresholds.

Washing machine water recycling.

In case of accidental water pollution, an alert protocol could be set up involving the network operators.

Makis area is located within the Sanitary Protection Zone III, where a very high level of groundwater protection needs to be guaranteed in order to preserve the quality and availability of the natural resource. Locally the bottom of excavation is expected to cross both the protective layers and the interlayers: around Zarkovo station, after Zarkovo station, in the area of Shaft 1 and at the Bele Vode station.

The bottom level of the excavation will be in contact with the aquifer layers after Zarkovo and in the area of Shaft 1, and in case during construction it is found that the lower levels of excavation reach the aquifer locally in any other areas.

The main Mitigation Measures include the following:

In the northern part, where D-walls will be used as retaining structure and definitive walls, no water will circulate along the wall infiltrating towards the aquifer.

In the southern part, sheet piles will be used as retaining structure and formwork for definitive walls. After structure construction, one out of two sheet pile will be withdrawn. The remaining one will be trimmed. The clay excavated in the C&C will be reused to reconstitute this impermeable barrier (protective layer).

These construction methods allow for the walls of the tunnel to be effectively watertight since the beginning of the excavation phase, because of their characteristics and the use of bentonite. Thus, once the lower layers are reached, there will be no lateral connection between the groundwater and the construction area.

As soon as the lowest design level is reached, a watertight concrete surface will be created at the bottom. This will minimize the duration of the local connection between the construction area and the aquifer (a few days for each compartment, as defined in the following paragraphs).

During this sensitive phase, an increased monitoring of the construction works will be performed.

Groundwater pumping will be needed during construction works for excavation stability in the C&C sections in Makis area. Pumping flowrate will be around 40-130 (m³/h).

The main Mitigation Measures include the following:

The compartment approach helps reducing it to a level that is considered to be easily manageable.

In Makis area the local drainage network is very rich and composed of both piped networks and open channels. Therefore, the impact of the volumes of water discharged after groundwater pumping during construction is considered moderate to low, and it will be distributed over several discharge points at different locations along the length of each compartment (150m).

To be discharged into the drainage network, pumped groundwater must comply with the regulations (quantitative and qualitative thresholds) set by the manager of the network, and a connecting agreement must be signed with the project's owner. If necessary, the discharge rates will be regulated in water retention and decantation units before discharge.

Moreover, from Makis station to Shaft 1, given the C&C important length and orientation (perpendicular to groundwater flows coming from East-South-East and going, such flow towards the Sava River) will be limited, so the C&C creation could generate a dam effect which might have:

- an influence on the availability of Beograd water supply source;
- a dissymmetrical water pressure on the retaining structures.

In the northern part (Shaft 01 to Bele Vode) where retaining structure will be D-Walls, the metro alignment and, as a consequence, the orientation of the retaining structure are parallel to the direction of the groundwater flow. Such orientation minimizes the dam effect. Therefore, no additional measure is deemed necessary at this stage on this section.

The main Mitigation Measure for the southern part (sheetpile) consist of a construction method based on the compartmentalization of the construction areas for the C&C section, in order to reduce the dam effect of the sheetpile structure onto the groundwater flow, and also to reduce the amount of groundwater to be pumped during works.

Surface water

In the area of future Makis PDR, Pretraz Canal (1-5) and Canal B (1-7-4), intercepted respectively by the Zarkovo station and the TBM launching construction site adjacent to the Bele Vode station, will be modified by the hydrotechnical solution planned to be implemented on the territory covered by the PDR of Makiš Field. Canal 1-5 is replaced by Collector 5 and Canal 1-7-4 is piped and deviated: due to the amount of water inflow, it is proposed to build a collector under Milorad Jovanovića Street, which will be connected successively to Collectors 5, 6 and 7, so that the inflow of water from the associated catchment areas is redistributed.

Collector 7 is not intercepted by the metro alignment. However, Collectors 5 and 6 are intercepted by the cut-and-cover sections on either side of the Zarkovo station.

At this stage of the project, it is planned to relocate these collectors permanently at a greater depth by designing siphon facilities.

Biodiversity

Impacted surfaces on the depot area are:

- 6.32 ha of scrubs and hedgerows;
- 2.21 ha of woodland, forest and other wooded land;
- 24.75 ha of regularly or recently cultivated agricultural, horticultural and domestic habitats;
- 0.72 ha of constructed, industrial and other artificial habitats.

Impacted surfaces for L1P1 alignment and stations are:

- 2.37 ha of scrubs and hedgerows;
- 2.90 ha of woodland, forest and other wooded land;
- 20.15 ha of regularly or recently cultivated agricultural, horticultural and domestic habitats;
- 11.22 ha of constructed, industrial and other artificial habitats.

The main Mitigation Measures include the following:

- Avoidance of areas of high interest;
- Cooperation with competent institutions;
- Obtaining of competent authorities consent before dendroflora impact;
- Renaturation of temporary used places;
- Fighting against invasive exotic species;
- Adaptation of the working hours;
- Adaptation of the planning of the project;
- Setting up bird nesting boxes and artificial roosts.

In Makis area, impacts on fauna (bats, terrestrial mammals, birds, amphibians and insects) will be very high due to the backfilling works. The impacts mainly concern habitat destruction and fragmentation and in some cases even possible individuals destruction. Several plots have already been identified by BMV in Makis area in order to compensate the loss in biodiversity (regarding the project impacts, including the ancillaries). In terms of surface area, the identified plots (36.5 ha total) correspond to the required surface (31.77 ha). The selection and the management of future compensatory measures plots will have to strictly meet the needs in terms of habitat types according to the impacted species.

Air quality and Noise

No significant adverse impact are expected for the operation phase of the metro. The potential noise impact at depot and station locations are mitigated with proper technical design to stay within the regulated levels, which will have to be validated in next design stage with detailed modelling, based on real acoustic data for all noisy equipment.

CUMULATIVE EFFECTS

Interaction among different types of impact of the project

During construction phase, the biggest cumulative effect will be due to the interaction of the impact on road traffic (deviations related to construction site footprint, truck traffic, etc.) and the socio-economic impact of construction works (nuisance to commercial activities around construction sites). Customers of local commercial activities could prefer competitors located in

different areas to avoid nuisance (traffic, dust, noise, vibration, etc.). A slight additional impact related to that aspect could be noise nuisance due to traffic flows displaced by traffic management plans to be established around several construction sites.

In Makis area, the modification of the topography (backfilling) and of the local drainage network (open channel transformed into piped collectors) will impact the regime of the local surface water. In order to minimize such impact, construction phase schedule will be planned according to the global development of Makis Project. Specific calculations will be performed by Contractor in order to reach the objectives set by Makis PDR.

During operation phase, the global impact of metro project and Makis urban development project will increase the pressure on local groundwater, surface water and biodiversity. Cumulative impacts have been studied by Makis PDR (SEA).

The interaction of impacts on Landscape and Socio-economic Aspects will have a positive effect around the new stations, due to the local redevelopment based on the architectural project of the station entrance. This, together with the obvious benefits of improved access to public transport, will increase the value of the area and be beneficial for local residents and commercial activities. For the depot area, the Landscape project will help compensating the impacts on habitat loss / Biodiversity due to the backfilling in Makis Field area.

Depending on the type of reuse that will be possible for Excavated Material during construction, the impact intensity might be reduced in case such materials are used for mine filling, for example.

Some other slight cumulative effects (or with a very low probability) are described in the document.

Cumulative effects due to L1P1 Metro Project and other surrounding projects

Cumulative effects of the metro project with Makis PDR are already described in the ESIA document, because the two projects and their effects are strictly related.

The compatibility of the metro project and the following PDRs is guaranteed by the PGR of Railway Systems:

- First local community in Žarkovo - "Julino brdo" (PDR): area of Shaft 02 and in the vicinity of Trgovačka station;
- Spatial cultural-historical unit Topčider - phase II, Unit 1 (PDR): area of Shaft 04 and Ada Ciganlija station;
- Spatial cultural-historical unit Topčider - phase II, Unit 2 – Wider zone "Belgrade Hippodrome" (PDR): in the vicinity of Shaft 04 and Ada Ciganlija station;
- Ada Ciganlija (PDR): in the vicinity of Shaft 04 and Ada Ciganlija station;
- Tunnel connection of the Sava and Danube slopes (PDR): Shaft 09 and in the vicinity of the Dunav station
- Linear Park (PDR): area of Dunav station, Shaft 9a and Pančevački Most station;
- Part of the area of Ada Huja (zone A) (PDR): area of Dunav station, Shaft 9a and Pančevački Most station;

Space between the streets: Boulevard Despota Stefana (November 29th), Mitropolita Petra, Dragoslav Srejski (Partizanski put) and Mije Kovačević, with deniveled intersection Pančevački bridge (PDR): area of Pančevački Most station.

In case of simultaneous construction phase with the metro project, potential cumulative impacts could appear. They shall be managed with appropriate CEMPs.

The area of the Sava river bank along the section from Sajam station to Savski Trg station is concerned by the project "Belgrade Waterfront" (Spatial Plan). Construction work for "Belgrade Waterfront" and for the Metro Project are not expected to overlap significantly. No negative cumulative impacts are expected during operation phase.

Concerning the area of Skadarlija station, it has to be noted that the PDR of Bajloni market project is currently under preparation. The project concerns the requalification of the entire area, including the footprint of Skadarlija station, and consist of rebuilding all buildings of Bajloni market and building an underground garage. Cumulative impacts cannot be assessed at this stage, until project definition will be completed.

Part of the central zone of the blocks between streets Venizelosova, Knez-Miletina and Đorđa Jovanovića is also concerned by a PDR. This area is located in the vicinity of the Skadarlija station. In case of simultaneous construction phase, potential cumulative impacts could appear. They shall be managed with appropriate CEMPs. No cumulative impacts are expected during operation.

GRIEVANCE MECHANISM

Respecting already available legal procedures for the submission of grievances, the Project Owner BMV is implementing additional measures to ensure that all questions, complaints and suggestions in relation to the Project are managed in accordance with international best practice.

At this stage of Project development, all questions and grievances are managed by BMV, however, it is expected that when construction intensifies, particularly in populated areas of the city, other stakeholders will need to be involved in grievance management, for example municipalities where the works are being carried out, as well as contractors engaged on the Project.

Beokom, as the City of Belgrade contact centre for reporting any grievances or receiving information, is also already available to Belgrade citizens, and may have an even more prominent role in the future, when construction works become more intense.

MONITORING METHODS

A QHSE (Quality, Health, Safety and Environment) team managed by a QHSE Manager, will monitor and follow-up the implementation and evolution of mitigation measures. The monitoring actions will concern:

Socio-economic monitoring program during construction phase, including aspects related to grievance management, Resettlement Action Plan, Traffic and Transport Management Plan, employment and procurement.

Air quality monitoring on depot area and L1P1 during construction and operation phase.

Noise level monitoring, particularly on depot area and C&C section during construction and operation phase.

Vibration level monitoring during construction and operation phase. Sensitive buildings identified during inspections should be equipped with vibration sensors.

Archeological surveillance on the parts of the alignment where the works will be performed by open excavation according to Article 110 of the Law on Cultural Heritage.

Regular maintenance and monitoring of the landscape project on the depot area and at the entrances of the stations over a period of 3 years. This monitoring will then be extended as part of the routine maintenance of green areas of the city, except for the green areas within the depot boundaries.

Excavated material monitoring, in order to guarantee its traceability and to check their compliance with the identified disposal destination. Additionally, Excavated soil from stations, shafts or at-grade section will be systematically analyzed in case of suspicion of pollution.

Piezometric and qualitative monitoring of groundwater around the depot area and along the alignment on a network of piezometers (at least one at each station location).

Monitoring of surface water quality, upstream and downstream of the discharge points for the wastewater coming from the depot area and monitoring of the wastewater collected within tunnel and stations/shafts before discharge into public networks.

Monitoring of the measures in favor of biodiversity, including steady monitoring during construction phase on the depot area, ecological transparency the ecological corridor, invasive alien species, artificial bat roosts, bird nesting box and reptile hibernacula, ecological monitoring of the biodiversity (depot area) and offset measures (railway loop and ecological corridor).