Non-Technical Summary

Reconstruction of the P-80 motor road Sloboda-Papernya km 0.000 – km 14.770

Финальный отчет

August 2017.

www.erm.com
European Bank for Reconstruction and Development

Non-Technical Summary

Reconstruction of the P-80 motor road Sloboda Papernya km 0.000 – km 14.770
Minsk and Smolevichi districts,
Minsk region, Republic of Belarus

August 2017

ERM Eurasia Limited confirms that this Report has been prepared with all reasonable skill, care and diligence and in conformity with the professional standards as may be expected from a competent and qualified consultant acting as Environmental and Social Lender’s Consultant having experience in providing services for projects with similar scope of work, complexity, issues and scales.

This Report has been prepared in accordance with the terms of the Contract concluded with the EBRD and the generally accepted environmental and social consulting practices and for intended purposes stated in the Contract. The conclusions and recommendations made in this Report are based upon information obtained directly by ERM Eurasia Limited, as well as information provided by third parties, which we believe to be accurate.

This Report has been prepared for the EBRD and we accept no responsibility for third parties whatsoever who may use all or portions of the information contained in this Report.
1 INTRODUCTION

1.1 PURPOSE OF THIS NON-TECHNICAL SUMMARY

This document represents Non-Technical Summary (NTS) of the Gap Analysis Report for the project of reconstruction of the P-80 motor road Sloboda-Papernya km 0.000 – km 14.770 (hereinafter "the Project"). The gap analysis has been performed against the national and international health, safety, environment, social, and stakeholder engagement requirements.

The purpose of NTS is to provide the public with simple and accessible basic information on the content and main conclusions of the following documents:

- Environmental Impact Assessment Report prepared in accordance with the requirements of the legislation of the Republic of Belarus;
- Gap Analysis Report;

In addition to this NTS, other documents will be provided to the public, e.g:

- Environmental and Social Action Plan (ESAP);
- Stakeholder Engagement Plan (SEP).
2 PROJECT OVERVIEW

2.1 R-80 ROAD

The P-80 motor road is a republican level facility, connecting the Belarus capital Minsk with the towns and cities in the capital region. The road is exposed to intensive intercity passenger and cargo traffic.

2.2 WHY IS THE RECONSTRUCTION NEEDED?

The proposed reconstruction of a section of the road will complete the ongoing construction of the 160 km long 2\textsuperscript{nd} Ring Road encircling Minsk.

2.3 WHAT DOES THE PROJECT CONSIST OF?

The Project envisages expanding around 15 km of the existing two-lane road to four lanes (Figure 2.3-1).

The reconstruction will be done in the following two stages:

- Stage 1: reconstruction of the 0.000-7.600 km section;
- Stage 2: reconstruction of the 7.600-14.770 km section.

Figure 2.3-1 Layout of the P-80 road’s section 0.000 – 14.770 km to be reconstructed
The road section crosses the Smolevichi and Minsk administrative districts of the Minsk region.

In particular, the road crosses the village of Okolitsa and also runs near the following villages and towns:
- Ostroshitsky Gorodok;
- Belye Luzhi;
- Raubichi;
- Baguta (including the Tavolga private housing cooperative);
- Sosnovaya; and
- Sloboda.

Where P-80 crosses the M-2 and M-3 roads, the existing cloverleaf intersections will keep their configuration, although two acceleration lanes under the overpasses will be added (Figure 2.3-2). Four new interchanges will be constructed at the following locations (Figure 2.3-3 and Figure 2.3-4):
- the village of Baguta;
- the 7.71 km mark (a military base);
- the village of Okolitsa; and
- Raubichi sports centre.
Figure 2.3-2  Schematics of intersections reconstruction (A) at M-2 motor road crossing and (B) at M-3 motor road crossing
Figure 2.3-3  Schematics of new intersections (A) near the village of Baguta, (B) at 7.71 km mark (military base)
Figure 2.3-4  Schematics of new intersections (A) at the village of Okolitsa and (B) near Raubichi sports centre
Nine at-grade junctions with acceleration-deceleration lanes will be constructed.

Project provides for, reconstruction and changing of place for 17 bus stops. Two rest areas will be also included:

- construction of a new right-side area at the 5.35 km mark; and
- reconstruction of an existing left-side rest area at the 5.6 km mark.

Residential houses located close to the road will be protected with noise shields 6.2 m high. The total length of the noise shields will be around 7 km (Figure 2.3-5).

Figure 2.3-5  View of the road section before and after the reconstruction and installation of noise shields

A parking lot for visitors will also be constructed near the tennis grounds of the Raubichi sports centre (Figure 2.3-6).
The Project also envisages construction of a covered storage for de-icing materials with the capacity of around 2,500 tonnes. This warehouse will be constructed within the premises of the existing LDD-54 linear road department in the village of Ostroshitsky Gorodok (Figure 2.3-7).
The Project’s key technical data is presented in Table 2.3-1 below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Stage 1 0.000-7.600 km</th>
<th>Stage 2 7.600-14.770 km</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road category</td>
<td>1-ν (1-ν in the Belarusian language)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length, km</td>
<td>8.46</td>
<td>7.17</td>
<td>15.63</td>
</tr>
<tr>
<td>Number of traffic lanes</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Carriageway width, m</td>
<td>2×7.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder width, m</td>
<td>2×3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadbed width, m</td>
<td></td>
<td>22.7</td>
<td></td>
</tr>
<tr>
<td>Road topping</td>
<td></td>
<td>cement concrete</td>
<td></td>
</tr>
<tr>
<td>Grade-separated crossings with other motor roads</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>At-grade crossings and junctions</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Number of overpasses</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Number of pedestrian underpasses</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Number of crossings for hoofed animals</td>
<td>1</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Total length of noise shields</td>
<td>2730.0 m</td>
<td>4210.0 m</td>
<td>6940.0 m</td>
</tr>
<tr>
<td>Number of the land plot withdrawal</td>
<td>—</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

2.4 **WHO IS DEVELOPING THE PROJECT?**

The Project was initiated by the Council of Ministers of the Republic of Belarus. The direct executor of the Project is the Republican Unitary Enterprise “Minskavtodor-Center” (*the Client*). Minskavtodor-Center will be also the road operator after the reconstruction.

Engineering documentation is being developed by the State Enterprise (SE) Belgiprodor (*the Designer*).

EBRD (*the Bank*) is contemplating financing of the Project. In accordance with the Bank’s categorisation, the Project is given Category A. As per EBRD’s Environmental and Social Policy, the Project requires a comprehensive Environmental and Social Impact Assessment (ESIA) and thorough public disclosure in line with the Banks guidance documents.

Acting as Bank’s independent consultant, ERM (*the Consultant*) has developed this NTS.

2.5 **WHEN WILL THE CONSTRUCTION WORKS START AND HOW LONG WILL THEY LAST?**

Construction is to being in January 2018 and is expected to last 22 months for each stage. Acceptance and commissioning will take about a month.

Thus the reconstructed road will be operational in November 2020.
2.6 **KEY CONSTRUCTION SOLUTIONS**

Construction works will be performed by contractors to be commissioned by the Client.

The construction personnel headcount for each stage is estimated will not exceed 200 persons.

The construction personnel will be residing in Minsk.

One half of the road will be closed for project-related activities. Traffic will be allowed on the other half of the road. A construction base will be erected at the 12 km mark on the right side of the road. The base will be used for temporary storage of construction materials and metalwork.

Stages 1 and 2 of the Project will be implemented in parallel (at the same time).

After the preparatory works (clearing of the right-of-way, removal of fertile soil etc.) builders will expand the existing roadbed and replace the road topping for cement concrete.

Materials to the construction site will be delivered by truck.

2.7 **WHAT PROJECT ALTERNATIVES WERE CONSIDERED?**

The following alternatives were considered during the design process:

- Comparison of environmental and social impacts between the Project implementation and the zero alternative;
- Comparison of two carriageway expansion techniques from the constructability perspective.

**Zero alternative**

The environmental and social impacts of the Project implementation in comparison with the zero alternative have already been reviewed in the preliminary EIA. The results of this comparison are summarised below in Table 2.7-1.
Table 2.7-1  Comparison of the Project and the zero alternative

<table>
<thead>
<tr>
<th></th>
<th>Alternative 1 (Project implementation)</th>
<th>Zero alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive factors</td>
<td>Adverse factors</td>
</tr>
<tr>
<td>Natural environment:</td>
<td>An expected improvement of the road’s</td>
<td>Temporary air pollution by exhaust gases from construction machinery. Contamination</td>
</tr>
<tr>
<td>ambient air</td>
<td>performance properties and traffic</td>
<td>associated with vehicle engines and wear of tyres and the road during traffic</td>
</tr>
<tr>
<td></td>
<td>conditions will reduce vehicle</td>
<td>and transportation of construction materials.</td>
</tr>
<tr>
<td></td>
<td>emissions.</td>
<td></td>
</tr>
<tr>
<td>Acoustic impact</td>
<td>If the proposed noise protection</td>
<td>The existing noise level is excessive at the adjacent residential area and may</td>
</tr>
<tr>
<td></td>
<td>measures are in place, the acoustic</td>
<td>increase even further.</td>
</tr>
<tr>
<td></td>
<td>stress at residential areas will be</td>
<td></td>
</tr>
<tr>
<td></td>
<td>normalised.</td>
<td></td>
</tr>
<tr>
<td>Natural environment:</td>
<td>Adoption of the latest construction</td>
<td>Withdrawal of lands. Significant stress on land and water resources during</td>
</tr>
<tr>
<td>soils, land resources,</td>
<td>techniques will minimise the amount</td>
<td>construction phase. Removal of vegetation within the road easement area.</td>
</tr>
<tr>
<td>surface and ground</td>
<td>of chemical and mechanical contaminants</td>
<td></td>
</tr>
<tr>
<td>water, vegetation</td>
<td>migrating from the road to adjacent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>territories and into water bodies.</td>
<td></td>
</tr>
<tr>
<td>Socio-economic</td>
<td>Reduced number of road accidents.</td>
<td></td>
</tr>
<tr>
<td>environment</td>
<td>Development of roadside services and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>entrepreneurship. Creation of new jobs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>related to road maintenance services.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improvement of the region’s social and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>economic performance.</td>
<td></td>
</tr>
<tr>
<td>Transport conditions</td>
<td>Increased cargo traffic. Reduction of</td>
<td>Temporary deterioration of transport conditions during the construction phase.</td>
</tr>
<tr>
<td></td>
<td>transport and maintenance costs (fuel,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lubricants, spare parts, servicing,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>amortisation, driver salaries,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>overheads etc.).</td>
<td></td>
</tr>
</tbody>
</table>

---

1 The wordings used in the table are taken from the preliminary EIA.
Comparison of road expansion options

The main design-induced criterion for construction works was to avoid disrupting transit flows. Thus, two road expansion options were developed:

- Option 1: the road is expanded on both sides, and the existing road axis remains in place;
- Option 2: the road is expanded, and the new axis is moved 2.85 m to the side.

Given that Option 2 has a higher constructability potential, it was chosen for further development.

2.8 HOW MUCH LAND IS NEEDED FOR PROJECT – HOW WAS IT OBTAINED?

The Project is planned taking into account the need to minimise physical and/or economic displacement of the local communities.

According to preliminary assessment (EIA) the permanent acquisition of private land for the Project will be limited to one plot for the construction of under-crossing of P-80 in Okolitsa.

The acquisition of land will not result in involuntary resettlement of the owner (owners) of this plot because the land is currently not built-up and offered for sale.

In addition to the said plot the Project land requirements include some land adjacent to P-80 and currently owned by the farming enterprise Ozeritsky-Agro.

The final scope of land acquisition or full list of affected land users are not currently known and will be identified and finalised later in the Project.

Compensations to the affected landowners will be determined in accordance with the national legislation.

According to the national legislation, affected farming and forestry enterprises will be entitled to material compensation of production losses.

The land plot to be acquired for the undercrossing may be purchased at a price which is not lower than its cadastral value taking into account the inflation from the date of valuation, or it may be exchanged for equivalent property.
3.1.1 **Current status**

The Client has conducted the preliminary environmental impact assessment (Preliminary EIA) for the Project in accordance with the national law and is conducting public hearings on the Preliminary EIA.

Further the Client intends to prepare the final version of the EIA (Final EIA) and undertake additional surveys for the Final EIA purpose.

The Social Impact Assessment has been carried out by the Consultant on assignment of the Bank. The Consultant has identified the Project stakeholders and developed Social Engagement Plan (SEP).

The Client has held consultations with stakeholders in the Minsk and Smolevichi districts. As a result of the meetings, a decision was made to re-design junctions in the villages of Baguta and Okolitsa.

3.1.2 **Project’s compliance to the national requirements relating to environmental protection, social performance, health and safety**

The Project is being developed in accordance with the requirements of the legislation of the Republic of Belarus.

The Preliminary EIA Report is currently available on the Client's website and websites of local executive authorities.

Currently the existing de-icing reagents storage facility planned for the reconstruction is located within the water protection zone of the Ostroshitskoye Water Reservoir. In case the storage facility is included into the Project, necessary additional measures must be conducted to ensure compliance with the legislation of the Republic of Belarus.

3.1.3 **Project’s compliance to the European Union requirements relating to environmental protection, social performance, health and safety**

The Project progress is generally in compliance with broad environmental protection, social performance, health and safety requirements of EU.

The Preliminary EIA for the Project undertaken for the Client identifies, describes and evaluates potential significant impacts on environmental and social components. In addition, the Consultant has performed a Social Impact Assessment and developed a Stakeholder Engagement Plan for the Project.

While the Preliminary EIA was generally performed in accordance with the approach detailed in Directive 2011/92/EU (as amended by Directive 2014/52/EU), some issues were not addressed, e.g.:

- The impact assessment does not cover potential cumulative impacts;
- The Project description does not include some parameters listed in Annex IV to Directive 2011/92/EU (e.g. quantity of water abstraction/intake, emissions during construction, etc.)
• Description of potential impacts of the Project sometimes does not allow conclusion on their characteristics (as defined in Annex III to Directive 2011/92/EU): scale, extent, probability, etc.

The Project will not affect the sites of Natura 2000.

The Safety Audit of the Project will be conducted separately in accordance with the requirements of Directive 2008/96/EU on road infrastructure safety management.
EXPECTED ENVIRONMENTAL IMPACTS OF THE PROJECT

Essential adverse environmental impacts of the Project are associated with the construction stage. Their duration is dictated by the timeframe of construction operations and their spatial extent will be confined to the motor road’s easement area and adjacent territories.

Environmental impacts of the Project will be less pronounced during the operational stage.

No cumulative and transboundary environmental impacts of the Project are expected to occur.

4.1 AIR EMISSIONS AND NOISE IMPACTS

Impacts of the Project on ambient air quality and noise levels are quite probable during both the construction stage (machinery traffic, transportation of construction materials, earthworks, etc.) and the operational stage (emissions from traffic of vehicles).

To minimize impacts on ambient air quality, the Project provides for a number of relevant measures, in particular:

- compliance of fuel, materials, products and equipment to be used for construction works with the requirements of the national legislation;
- compliance of construction techniques with the requirements of the national legislation; and
- shortening of braking/acceleration distances owing to motor road widening.

The Project provides for the following measure to mitigate impacts of noise:

- compliance of fuel, materials, products and equipment to be used for construction works with the requirements of the national legislation;
- compliance of construction techniques with the requirements of the national legislation;
- landscaping of the R-80 motor road route; and
- installation of noise shields.

4.2 SURFACE WATERS

The P-80 section proposed for reconstruction crosses the Domelka River and a non-operational canal, which was previously constructed in the Volma River head area (Figure 4.2-1). There are also soil-reclamation canals near the motor road; the canals flow into the nearest natural watercourses.

There are some water bodies of the artificial origin in the motor road vicinity. The nearest water body is located about 70 m to the left, near the village of Okolitsa.
There are two water reservoirs near the motor road, they are the Dubrovskoye Water Reservoir and the Ostroshitskoye Water Reservoir. The Dubrovskoye Water reservoir is located about 500 m northward of the subject motor road and the latter is beyond the water protection zone of this reservoir. The Ostroshitskoye Water Reservoir is at a distance of about 1 km to the north-west of the motor road. The de-icing reagents storage facility is located within the water protection zone of the Ostroshitskoye Water Reservoir.

Figure 4.2-1  Surface water bodies in the vicinity of the P-80 motor road

Impacts of the Project on surface waters will be caused by water intake for construction needs from the pond located near the village of Okolitsa. In addition, surface water runoffs from the road bed during the operational stage will contribute to impacts. Surface water runoffs generated in the water protection zone of the Domelka River will be treated before discharging. To minimize impacts on surface waters, the Project provides for a number of relevant measures, in particular:

- compliance of the proposed Project activities within riparian buffer strips and water protection zones of surface water bodies with the requirements of the national legislation;
- treatment of storm water run-off from the roadbed if no diversion outside riparian buffer strips is possible;
- banning of unauthorized parking of vehicles;
- storage of construction materials, products and structural units in designated areas;
- accumulation of sanitary wastewater in concrete sumps at construction sites with subsequent hauling to wastewater treatment facilities;
• surface water drainage and clarification on sites where water is regularly used for dust suppression;
• reuse of water for dust suppression after its clarification;
• prohibition of storage and discharge of materials and substances generated during construction works to water bodies and ground surface depressions;
• monitoring of littering of watercourses located near construction sites;
• arrangement of collecting ditches with settling pits around construction sites;
• fuelling and servicing of road construction equipment and vehicles in designated areas;
• storm water discharge from the roadbed outside riparian buffer strips;
• equip the de-icing reagents storage facility site so that to prevent water contamination in the Ostroshitskoye Water Reservoir.

4.3 GROUNDWATER

The Project does not provide for groundwater abstraction. No significant impacts on groundwater are expected on condition that measures listed above are properly implemented.

4.4 TOPOGRAPHY AND GEOLOGY

Impacts on the topography and geological environment will be primarily associated with road earthworks. On the one hand, the earth roadbed may serve as a dam which drains the territory on one side from the road, and on the other hand, it may cause the waterlogging of lands on the other side, in the surface runoff direction. Potential impacts may also be manifested in activation of hazardous geological processes, such as erosion, landslides, etc.

To minimize impacts on the topography and geological environment, the Project provides for a number of relevant measures, in particular:

• construction of water gutters and surface runoff inlets;
• strengthening of roadbed slopes and bottoms of roadbed ditches (grass seeding);
• installation of culverts in ground surface depressions.

4.5 SOILS

Impacts of the Project on soils will be associated with the impact on the geological environment. Potential impacts may be manifested as drying and overwetment of soils under changing conditions of the groundwater flow and soil contamination.

To minimize impacts on soils, the Project provides for a number of relevant measures, in particular:
• application of the land allocation minimization criterion at the design stage and observance of allocated land boundaries during construction operations;
• remediation of lands to be temporarily used for Project activities followed by passing of land title to land users;
• removal and stockpiling of topsoil for further usage in the course of land remediation and roadbed slope strengthening works;
• installation of culverts and construction of roadbed ditches;
• strengthening of roadbed slopes and bottoms of roadbed ditches.

4.6 FLORA

Various plant communities can be met in the Project implementation area. The most common natural communities are forests such as spruce forests, pine forests, birch forests, etc. Depressed and waterlogged areas are represented by bog vegetation. Floodplains are overgrown with riparian-aquatic plants.

Modified vegetation is represented by forest shelter belts along the motor road route and by segetal and ruderal vegetation.

The Prilepsky Landscape Protected Area of national significance is situated in the immediate vicinity of the subject motor road section. Its boundary runs along the right-of-way of the P-80 motor road (Figure 4.6-1).

![Figure 4.6-1 Location of the Prilepsky Landscape Protected Area](image)

To greater extent, impacts of the Project on flora will be caused by land clearing works in the course of motor road expansion operations. Changes in plant communities may also occur due to waterlogging and flooding phenomena. In addition, plants will be affected by polluted ambient air at the motor road operational stage.
It is anticipated that motor road expansion operations will not affect both protected species and unique biotopes.

To minimize impacts on flora, the Project provides for a number of relevant measures, in particular:

- compliance with requirements to carrying out economic activities within the boundaries of natural reserves when performing proposed works in the vicinity of the Prilepsky Landscape Protected Area; at the design and construction stages ensure coordination with the Minsk District Executive Committee which manages this protected area;
- compensatory reforestation or reimbursement for losses of trees on forest lands and in settlements;
- observance of allocated land boundaries during construction operations;
- impose a ban on both hot works and burning of debris in high fire-prone territories;
- storage of construction materials, products and structural units in designated areas;
- stockpiling of felling debris in designated areas; removal of felling waste;
- impose a ban on burning of felling waste;
- measures aimed at prevention of mechanical damage to trees by operating road construction equipment and filling of root-collars.

4.7 FAUNA

Fauna in the Project implementation area is predominantly represented by common species in their associated ecosystems throughout the Belarus territory.

No bird species sensitive to man-caused impacts and listed in the Red Data Book of the Republic of Belarus were revealed in the territory of planned economic activities.

The motor road crosses the territory occupied by hunting entities of the Minsk District Organizational Structure of the Republican State-Public Association “Belarusian Society of Hunters and Fishermen” and entities of the Smolevichi District Organizational Structure" of the Republican State-Public Association "Belarusian Society of Hunters and Fishermen”.

As is evident from the map of the main migration corridors of hoofed animals in the territory of the Republic of Belarus, the P-80 motor road crosses the M2-M3-M6-M7 migration corridor.

Impact of the Project on fauna will be primarily due to changing of habitats and potential death of certain fauna species.

To minimize impacts on fauna, the Project provides for a number of relevant measures, in particular:

- impose a ban on filling up of natural depressions, artificial water bodies and artificial depressions with indications of water stagnation in spring;
• impose a ban on burning of felling waste;
• impose a ban on traffic of the road construction machinery through the adjacent areas;
• impose a ban on cutting down of trees and shrubs in areas adjoining to water bodies used by amphibians for reproduction;
• carry out additional field surveys in spring to identify migration corridors of amphibians;
• removal of trees in autumn and winter seasons, where possible;
• construction of culverts and ditches in the roadbed slopes;
• temporary imposing of speed limits in areas of migration routes of amphibians and posting of corresponding warning signs if migration corridors of amphibians are discovered;
• arrangement of a 30 m wide right-of-way where cutting of shrubs and mowing will take place;
• use of closed (covered) containers for waste in rest areas and regular waste removal;
• arrangement of a special crossing for hoofed animals at road segment km 5.9;
• construction of mesh wire fencings on both sides of the road;
• posting of signs warning of wild animals;
• impose a ban on mowing of roadsides during the breeding season of coleopterous insects (last ten days of May, first ten days of June, first ten days of July).
EXPECTED SOCIAL IMPACTS OF THE PROJECT

5.1 ECONOMY

5.1.1 Economic situation and investment opportunities

The economic impact of the Project during construction will consist of certain growth of building material production and construction work services in Minsk and Brest regions.

The reconstructed P80 Motorway will have better transportation and operation parameters which will make the Minsk and Smolevichi districts more attractive for investors.

Increased P80 traffic intensity can stimulate development of motorway services.

*Potential impact on the economic situation and investment opportunities within the Project implementation area will be positive.*

5.1.2 Local industries

Construction plans provide for involvement of local suppliers of building materials and constructions. These suppliers include industries located in the settlements of Minsk Region (Korolyov Stan, Zaslavl, and Fanipol) and Brest Region (Mikashevichi).

Local road building companies can also take part in the tender for the project construction works.

*Potential impact on local industries during construction will be positive.*

Increased traffic flow expected after the Project implementation may increase attendance and profits of Oasis Café, the only motorway services facility located within the affected motorway section.

*Potential impacts on local motorway services will be positive.*

Due to safety requirements for Category 1 roads multi-level flyovers will replace all at-grade intersections. Reconstruction of the existing at-grade intersections (crossings) and construction of viaducts will increase the travel distance for vehicles crossing the subject section of P80.

The Project implementation will result in increased transport expenses of companies and organisations located within the Project implementation area due to increased mileage of vehicles.

Following consultations with the district authorities the Client and the Design organisation agreed to make changes to the design of the intersection at Sosnovaya which include extension of local driveways to enable access of agricultural machinery of Ozeritsky-Agro to the fields.

---

1 Including the main crossing and the left-turn exits to local roads and entrances to the motorway that require left turns
Due to the prohibition of left turns for trucks using local road H9539 (Sosnovaya – Zadomlya) these vehicles would have to use the M2 toll road at the intersection at Kurgan Slavy. The above-mentioned changes to the design will minimise additional transport expenses of this farming enterprise.

In case of changes in design decisions regarding interchange in the Okolitsa village, the force of impact to JSC "1st Minsk poultry factory" can be also reduced.

5.2 LABOUR MARKET AND COMMUNITY INCOMES

No direct impact on the labor market and community incomes will occur. Indirect impacts may be associated with multiplier effects on the local economy and potential development of motorway services.

_Potential indirect impact will be positive._

5.3 HEALTH AND SAFETY

During construction, potential impacts on the community health and safety may be caused by the increased of traffic on local roads associated with transportation of goods and materials for the P80 Motorway reconstruction.

Basing on the state of the existing transport network can be assumed that materials and goods will be carried via the following local roads:

- **Dzerzhinsky District:**
  - H8364 (the road section passing near Cherkassy and Fanipol);
  - Zavodskaya and other streets in Fanipol that will be used for transportation of goods;

- **Minsk District:**
  - H9031 (the road section passing near Zagorye, Semkovo, Primorye, and several gardening cooperatives);
  - H9037 (the road section passing across Skuraty and Korolyov Stan);

- **Zaslavl:** Zavodskaya and Sovetskaya streets, H8941.

Once transportation routes and traffic intensity have been established, it will be necessary to undertake the following:

- conduct inspection of roads to gather information about condition of the roadbed and shoulders at the preparation stage;
- Where appropriate make roadbed repairs prior to commencement of construction and transportation of Project goods and materials;
- inform the community about expected increase in traffic intensity and proposed impact mitigation measures (road repair), as well as about available grievance mechanism; and

---

1 The toll must be paid by vehicles with the technically allowed total weight exceeding 3.5 t; exempt from toll payment are cars registered in the territory of the Eurasian Economic Union, motorcycles, wheeled tractors, and urban public transport buses.
• on completion of construction conduct inspection of roads to gather information about condition of the roadbed and provide for repairs, if necessary.

During operation, potential impacts on the community health and safety will be associated with increased traffic via the P80 Motorway and within settlements due to construction of transport intersections.

Construction of the intersection in Okolitsa will result in considerable increase of traffic intensity on Lugovaya, Solnechnaya and Tsentralnaya streets and, consequently, in increased pollutant emissions, noise levels and dust generation. Increased traffic intensity within the village will also affect the safety of pedestrians, in particular, children and vulnerable groups, e.g. wheelchair persons and elderly people.

Taking into account the existing traffic intensity at the crossing of P80 with local road H9059 in Okolitsa it can be assumed that the new intersection will redirect the entire traffic flow (approximately 3,000 vehicles), including trucks, to the streets of the village.

During public consultations held on 31 July 2017 residents of Okolitsa voiced their concerns with regard to the proposed intersection. In response to serious concerns of the community the Client (Minskavtodor/Company) and the Design organisation decided to raise the issue of the need to review the design solutions for the intersection in Okolitsa at the meeting of the Science and Engineering Board that will be held on 3 August 2017 at the Ministry of Transport and Communications (Services).

ERM recommends that the Client and Design organisation review the possibility of removal of the intersection beyond the village boundaries. Such a decision would prevent any impacts associated with potential increase of traffic intensity within the village.

If this proposal cannot be implemented, i.e. re-design of the intersection is not feasible, it will be necessary to engage with the traffic police/road safety authority and implement some measures aimed at improvement of road safety, e.g.:

- establish a controlled pedestrian crossing at the crossing of Tsentralnaya and Solnechnaya streets, as well as pedestrian crossings and walkways/sidewalks in the rest of the village streets;
- introduce additional speed limitations (20 to 40 km/h);
- install/build artificial speed control bumps/humps, etc.; and
- prohibit traffic of trucks within settlements at night time.

5.4 Social Infrastructure

Improved transportation and operation characteristics of P80 will contribute to traffic and road safety, including safer transportation of children in school buses during the school year.

This impact will be positive.
5.5 SERVICES AND UTILITIES

Construction activities will include intervention/rearrangement of services (utility lines) within the area of construction works.

The Client (Company) will obtain technical specifications for the reconstruction of services. For the changes to major and technically complex services the Company will employ specialized contractors responsible for operation and maintenance of these services. Changes to minor service/utility lines will be made using own resources of the Company.

The load on communication will be additional energy consumption for illumination of the road – after the reconstruction the whole distance will be illuminated.

At the time of development of this report information on required additional energy consumption and its potential sources is unavailable

Potential impact on services and utilities may be assessed on the stage of Project Design Documentation development.

5.6 TRANSPORT INFRASTRUCTURE

Impacts on the transport infrastructure during construction will be associated with transportation of goods for the Project. Increased loads on local roads may result in deterioration of the roadbed quality.

It is assumed that the roads listed in Section 5.3 of this document will also be affected by this impact.

Since no decision on the routes for material and building structures transportation was made the investment feasibility study/TEO stage, recommended impact mitigation measures include priority use of national motorways and minimization of traffic on local roads passing by/along settlements.

Once transportation routes and traffic intensity have been established, it will be necessary to undertake the following:

- conduct inspection of roads to gather information about condition of the roadbed and shoulders at the preparation stage;
- Where appropriate make roadbed repairs prior to commencement of construction and transportation of Project goods and materials;
- inform the community about expected increase in traffic intensity and proposed impact mitigation measures (road repair), as well as about available grievance mechanism; and
- on completion of construction conduct inspection of roads to gather information about condition of the roadbed and provide for repairs, if necessary.

Potential impacts on the transport infrastructure during operation will relate to the reconstructed P80 section, new lanes and viaducts, and modernisation of local driveways in Okolitsa1.

1 No final decision on the junction in Okolitsa had been made at the time of this Report. The further assessment in accordance with based on the option which involves passage via Lugovaya, Solnechnaya and Tsentralnaya streets.
The upgrading of P80 to Category 1 will:

- improve transportation and operation characteristics of the motorway;
- increase traffic capacity;
- improve overall traffic safety and reduce the risk of accidents due to separation of traffic flows, construction of pedestrian subways, etc.

Potential impacts on transport infrastructure during operation will be positive.

### 5.7 LAND USERS

Construction of new driveways and viaducts will require acquisition of land plots adjacent to the motorway and owned by individuals and organizations. One privately owned (by a physical person) plot will be required for the construction of an under-crossing of P80 in Okolitsa (Figure 5.7-1).

![Figure 5.7-1 Land plot in Okolitsa required for the under-crossing construction](image)

As of June 2017, the plot was not built-up or planted and was offered for sale.

Compensation amounts for acquisition of privately owned land plots for public needs\(^1\) are determined as follows:

- if the plot was purchased at the public sale of land, compensation amount will be equivalent to the auction cost of the plot allowing for inflation;
- in all other cases compensation amounts will be equivalent to the cadastral value of a given plot.

At the wish of the owner the latter may receive an equivalent allotment as a compensation for the plot acquired for the public needs.

ERM recommends early engagement with the plot owner to settle the issue of compensation amount.

---

\(^1\) 'Regulations on acquisition of privately owned land plots for public needs' approved by the Council of Ministers of Belarus, Decree 462 of 26.03.2008
Following public consultations undertaken on 31 July 2017 the Client and the Design organisation decided to raise the issue of the need to review the design solutions for the intersection in Okolitsa at the meeting of the Science and Engineering Board that will be held on 3 August 2017 at the Ministry of Transport and Communications (Services).

If the proposed intersection in Okolitsa is removed/designed out, no acquisition of the privately owned plot will be required.

The Project land requirements for the widening of P80 and construction of new intersections include some land adjacent to P80 and currently owned by the farming enterprise Ozeritsky-Agro.

The land acquisition will affect only marginal parts of the farmland and will not result in separation of the fields. However, this area may include forest shelter-belts. Subsequent restoration of these belts may result in additional expenses that will have to be incurred by the affected organisation.

In the case of farmland, potential losses of agricultural production must be covered. Compensation amounts will be determined by:

- location of plots;
- soil quality;
- intensity of agricultural production; and
- degree of amelioration.

Approximate losses of agricultural production are assessed during preliminary agreement on acquisition of particular land plot. The actual size of losses is determined during land acquisition planning and establishing of the plot required for the Project facilities.

The Project provides for the landscaping of the area adjacent to P80 which will facilitate restoration of the forest shelter-belt.

### 5.8 QUALITY AND STANDARDS OF LIVING

The Project implementation may result in some adverse impacts which will have a combined effect on the quality and standards of living of the local community. These effects will include:

- Increased air pollution, noise levels, and dust generation at the proposed intersections near residential areas and associated health and safety risks;
- Deterioration of landscape visual properties.
- Increased transport expenses of local residents due to greater travel distances when crossing P80.
- Segmentation of settlements and interconnection of areas due to the median strip along the entire length of P80 and prohibition of road crossing outside of specially designated and equipped pedestrian walkways.

Installation of noise screens/barriers may limit visibility and reduce duration of insolation of houses located along the P80 Motorway.

Proposed construction of an intersection within Okolitsa will have an adverse visual impact on the surrounding area and landscape.
Removal of left turns, at-grade crossings and construction of multilevel intersections will increase the travel distance for vehicles crossing P80.

Potential increase of travel distance, which will depend on the direction and particular intersection used, may amount to 2.6 km\(^1\) for personal vehicles of local residents.

The Project aims to upgrade P80 to a Category 1 road. Safety requirements for roads of Category 1 prohibit:

- road crossing outside of specially designated and equipped pedestrian walkways;
- at-grade crossings of traffic flows.

The subject section of the P80 Motorway passes through one settlement, the Village of Okolitsa. Other settlements are located on one side of the motorway.

The crossing of P80 with H9059 (a local road) is also located within Okolitsa. Implementation of the required road safety measures, e.g. separation of traffic flows by a median strip and construction of one pedestrian subway, along with prohibition of road crossing outside of specially designated and equipped crosswalks, may result in segmentation of the village and affect interconnection of areas:

1. As of July 2017, residents of houses facing P80 (in Shosseinaya, Kovalkova and Fabrichnaya streets) use direct exits from P80. After implementation of the Project it will be possible access houses in Shosseinaya Street only via Tsentralnaya Street and the exit to Kovalkova and Fabrichnaya streets will be accessible only via Ozernaya Street. This will increase the travel distance within the village and affect interconnection of areas within the settlement.

2. The proposed pedestrian subway will be located at the distance of 200 m from the existing crosswalk, i.e. the walking distance to the only store in the village will increase by 400 m per each visit. This increase will be significant for vulnerable groups, e.g. wheelchair persons and elderly people.

3. A summer camp for children is located in the western part of the village. In addition, at the time of this Report, construction of a church was in progress. Residents may cross the existing P80 Motorway at km 10 and km 11 because road safety regulations allow crossing of a two-lane road outside of designated pedestrian crosswalks if no such crosswalks are in sight.

The above-mentioned factors will affect the interconnection of areas in Okolitsa. However, these impacts will not result in complete isolation of parts of the village located on different sides of P80.

Embedded controls for mitigation of landscape and visual impact include landscaping of areas adjacent to the P80 Motorway.

During public consultations residents of Okolitsa repeatedly voiced their concerns with regard to the proposed construction of the intersection in the streets of their village, including concerns with potential pollution and decline of safety. It was proposed to remove the intersection to the east from the

---

\(^1\) Maximum increase of the travel distance for local residents taking into account the proposed construction of an intersection within Okolitsa
village, even though this change to the design may result in further increase in travel distances.

The Client (Minskavtodor/Company) and the Design organisation decided to raise the issue of the need to review the design solutions for the intersection in Okolitsa at the meeting of the Science and Engineering Board that will be held on 3 August 2017 at the Ministry of Transport and Communications (Services). After the meeting of the Science and Engineering Board on 3 August 2017 the Client disclosed the updated design of the intersection in Okolitsa which now must be discussed with the village community.

Potential impact on interconnection of areas in Okolitsa due to separation by P80 will be mitigated through:

- construction of a pedestrian subway that will be also designed for people with limited mobility, e.g. wheelchair persons;
- construction of pedestrian walkways and cycle lanes leading to bus stops and pedestrian subway.

Since the final decision on the intersection in Okolitsa has not been passed yet, the Consultant recommends that the Client and Design organisation review the possibility of removing the intersection beyond the village boundaries. This will prevent any landscape and visual impacts within the settlement.

- Additionally recommended measures with regard to visual impact of the Project include the use of colour schemes and decorative elements during in the design of noise barriers.
- In order to maintain interconnection of areas it is proposed to consider the possibility of establishing two pedestrian crossings in Okolitsa.
HOW DO THE STAKEHOLDERS’ OPINIONS CONSIDERED?

The Bank’s Performance Requirements provide for active involvement of stakeholders in the decision-making process for the Project. Stakeholders’ participation is provided by special engagement mechanisms, including meetings, public hearings, and consultations.

During development of the feasibility study and environmental impact assessment, in accordance with the national legislation, representatives of the Client and Designer conducted consultations with local authorities, and in March – May 2017 they sent official letters requesting information from the authorities.

Initial public consultations were conducted in July 2017 in the Minsk and Smolevichi District Executive Committees during the Project’s gap analysis procedure and preparation of the documentation package for the Project information disclosure.

Following the consultations in Smolevichi District Executive Committee, the Client jointly with the Designer adopted a decision on considering alternative locations for the interchange. An alternative location was proposed with construction of local roads\textsuperscript{1} for agricultural machinery and vehicles.

An official national procedure for public consultations on the Preliminary EIA Report was launched in July 2017.

Stakeholder consultations on the Project design in line with the Bank’s Performance Requirements were conducted on 31 July 2017.

Residents of the affected settlements actively participated in discussions of the design decisions. Concerns and proposals were partly formulated in writing and handed over to representatives of the Client. These public enquiries will be reviewed and the relevant answers will be communicated to the addresses specified in such enquiries.

As a result of the consultations, the Project presentation, including the road reconstruction layouts and major design decisions, was published on the corporate web site of the Client.

After consultations the Company and Consultant have also received written requests from local population to reconsider their concerns about design solutions (Appendix 1).

Due to public concerns, a revision of the design decisions related to the road interchange in Okolitsa will be done, and alternative design will be communicated to the village inhabitants. Additional meetings with residents of Okolitsa will be held to coordinate the updated design decisions. If necessary, there will be several such meetings in order to reach a compromise.

\textsuperscript{1} Translator’s note. Roads parallel to the Motorway to enable local traffic.
A “grievance process” is in place to allow all those potentially affected by the Project’s construction and operation to raise concerns when they believe they are being or may be adversely impacted in the future.

As of July 2017 the Client implements a grievance mechanism which meets the requirements of the national law.

Individual and organisations may submit grievances:

- in writing, including comments and/or proposals that will be entered in the Book of Comments;
- electronically as e-mails or using a feedback option on the website (http://www.maddor.by/contact/forma-obratnoi-svyazi/); and
- verbally, during personal reception.

The following person has been designated by the Client to be responsible for the public to contact in case of any grievances or other concerns related to the Project:

Mr. Oleg Vodyanovich  
Office address: room 109, Kal’variysakya st., Minsk, 37220073  
Phone / fax: (8017) 259 85 95  
E-mail: minskavtodor-center@tut.by

The existing mechanism will be updated to comply with the Bank’s Performance Requirements.
ERM has over 160 offices
across the following
countries and territories
worldwide

Argentina  Norway
Australia   Panama
Belgium     Peru
Brazil      Poland
Canada      Portugal
Chile       Puerto Rico
China       Romania
Colombia    Russia
France      Singapore
Germany     South Africa
Hong Kong   South Korea
India       Spain
Indonesia   Sweden
Ireland     Switzerland
Italy       Taiwan
Japan       Thailand
Kazakhstan  The Netherlands
Kenya       United Arab Emirates
Malaysia    United Kingdom
Mexico      United States
Mozambique  Vietnam
New Zealand

ERM’s Moscow Office

11/13, Building 3
Trekhprudny Pereulok
Moscow
T: +7 (495) 234-31-77
F: +7 (495) 234-31-78

www.erm.com
ANNEX 1

Petition of residents of settlement Okolitsy
Обращение

Нам, жителям деревни Околица, 31.07.2017 стало известно, что по нашему населенному пункту пройдет объездная кольцевая дорога МКАД-2 "Острошицкий Городок – Курган Славы", буквально в трех метрах от жилых домов и огородов. Согласно нормам, от осевой линии до жилых помещений должно быть расстояние не менее 100м. То есть нормы прохождения дороги по населенному пункту не будут соблюдены.

Местные власти, Острошицко-Городокский сельский совет, с жителями строительство кольцевой дороги не согласовывал. И только тогда, когда жители подняли вопрос о проведении дороги через деревню Околица, власти "зашевелились" в нужном им направлении, обещая "золотые горы" - содействие во внесении изменений в проект дороги, а так же в благоустройстве деревни (асфальтирование и освещение прилегающих улиц). Однако при этом дорога не будет выноситься за пределы деревни.
Нам стало известно, что финансовое обеспечение будет осуществлять "Европейский банк реконструкции и развития"; строя экологически не чистую дорогу. Будущий маршрут кольцевой дороги – сплошной "кошмар" для жителей деревни Околица от шума и выхлопных газов автомобильного транспорта. Жители некоторых домов не увидят даже света из-за предполагаемых шумовых щитов, так как эти щиты будут находиться очень близко от домов.
Округа деревни Околица, где будет проходить трасса, является местом отдыха жителей и большого количества дачников. Здесь расположены пруды и "зеленая" зона, которые будут уничтожены.
Интересно, кто же мог так жестоко обойтись с природой и жителями деревни, даже не спросив их мнение?!
Этот вопрос можно решить, если дорогу перенести в район Узборья и проложить через лесной массив, что позволит оставить жителей в покое и решить проблему прохождении дороги "МКАД-2" по деревне Околица.

Александр Григорьевич!
Вы всегда в своих выступлениях говорите о "…согласен ли народ и какую он даст оценку этому решению....". Наше мнение: "Мы не согласны со строительством кольцевой дороги на территории деревни Околица! И даем крайне отрицательную оценку чиновничьему беспределу!!!"
Александр Григорьевич, пришлите, пожалуйста, представителя власти, который бы прошел по будущей трассе, все увидел своими глазами и, наконец, встретился с жителями, и услышал бы наше мнение, которого так боятся местные власти!
Если вы считаете, что в Республике Беларусь хозяином является трудовой народ, и его благополучие – главная задача Президента, помогите решить вопрос о переносе будущей кольцевой дороги за пределы деревни Околица.

С уважением, жители деревня Околица.
Список с подписями жителей деревня Околица прилагается.

Ответ на данное обращение просим отправить по адресу:
223054, минский район, д.Околица, ул.Фабричная, 38.
Вардомский Виктор Алексеевич (инвалид 2 группы).
Контактный телефон +375 44 7575 058.
Заверская Надежда Антоновна
Вардамская Валентина Петровна
Вардомский Виктор Алексеевич
ВВ Герман Владимир Николаевич
объект Валентина Владимировна

Пирсова Мария Ивановна

Тирас Руслан Головаа

Соколов Игорь Иосифович

Виланков Иван Иосифович

Волков Андрей Петрович Ростиславовна Ольга

Михайлова Ольга Романовна

Корошев Антон Александрович

Рахимов Гамилла Владимировна

Курбова Вера Вениаминовна Руслан

Бузгой Ирина Евгеньевна

Бузгой Зоя Евгеньевна

Бузгой Иван Евгеньев

Абдулова Елена Евгеньевна

Абдулова Лариса Игоревна

Абдулова Евгения Камиловна

Константинов Николай Александрович

Королев Константин Николаевич Камилович

Абдулов Николай Абдулович Абдулович Камилович

Абдулов Евгений Абдулович Камилович
Иванов Василий Иванович
Шумский Валерий Иванович
Шумская Светлана Владимировна
Свирипов Михаил Викторович
Община франциска Ефимовна
Шумская Евгений Николаевич
Васильевская Анна Ефимовна
Васильевский Владимир Петрович
Михайловская Евгения Владимировна
Свириповская Констанция Ивановна
Тарасова Нина Валерьевна
Карпенко Валерий Викторович
Тарасов Карим Рубенович
Ука итвич Николай Иванович
Буракова Ирина Дмитриевна

Загорско Светлана Владимировна

Чук Яна Афанасьевна

Огурцов Александрович

Шевцов Олег Петрович

Шевцова Людмила Сергеевна

Конярева Кристина Николаевна

Волостов Геннадий Николаевич

Анисьев Георгий Николаевич

Подговова Анна Николаевна

Блахов Мария Афанасьевна

Надежда Костасевича