Non-Technical Summary

Environmental and Social Impact Assessment of the Proposed Reconstruction and Modernisation of the Belgrade Airport

December, 2020
| **Prepared by:** | ENVICO Ltd, Belgrade, Serbia  
LINK 011, Belgrade, Serbia |
|------------------|---------------------------------------------------------------------|
| **Title:**       | Non-Technical Summary of the Environmental and Social Impact  
Assessment of the Proposed Reconstruction and Modernisation of  
the Belgrade Airport |
| **Client:**      | Belgrade Airport Beograd Ltd |
| **Developed by:**| Dušan Nedeljković, MSc, ENVICO Ltd, Belgrade, Serbia  
Milica Karanac, PhD, ENVICO Ltd, Belgrade, Serbia  
Verica Simić, MSc, ENVICO Ltd, Belgrade, Serbia  
Miloš Tišović, BSc, ENVICO Ltd, Belgrade, Serbia  
Jelena Oplanić, LINK 011, Belgrade, Serbia  
Branko Radovanović, LINK 011, Belgrade, Serbia |
| **QA/QC:**       | Vladan Stepanović |
| **Version:**     | 2.0 |
| **Status:**      | Final |
| **Date:**        | 1 December, 2020 |
| **Cover photo source:** | VINCI Airports Serbia |
# Table of Contents

1. **Introduction** .......................................................................................................................... 6  
   1.1. Background .......................................................................................................................... 6  
   1.2. Purpose of the Document ................................................................................................. 6  
   1.3. Availability of the NTS for Review and Questions ............................................................ 7  

2. **Summary Description of the Project** ..................................................................................... 8  
   2.1. Project Location ................................................................................................................ 8  
   2.2. Project Description ............................................................................................................ 8  
   2.3. Project Activities ............................................................................................................. 13  
      2.3.1. Construction phase ....................................................................................................... 13  
      2.3.2. Operation phase .......................................................................................................... 13  
   2.4. Project Policy and Regulatory Framework ....................................................................... 16  
   2.5. Airport Safety Protection Zones ...................................................................................... 16  
      2.5.1. Plan of Detailed Regulation .......................................................................................... 16  
      2.5.2. Aircraft Crash Risk Assessment .................................................................................. 17  

3. **Environmental and Social Baseline Conditions** ................................................................. 19  
   3.1. Environmental Baseline Conditions ................................................................................. 19  
      3.1.1. Land Use .................................................................................................................... 19  
      3.1.2. Air Quality ................................................................................................................. 19  
      3.1.3. Noise and Vibration .................................................................................................... 19  
      3.1.4. Soil and Groundwater Quality .................................................................................. 20  
      3.1.5. Surface Water Quality .............................................................................................. 20  
      3.1.6. Biodiversity ............................................................................................................... 20  
   3.2. Socio-Economic Baseline Conditions .............................................................................. 21  
      3.2.1. Baseline Collection Methodology and Constraints ....................................................... 21  
      3.2.2. Study Area (Area of Influence) .................................................................................. 22  
      3.2.3. General Local Context ............................................................................................... 25  

4. **Environmental and Social Impacts and Mitigation Measures** ........................................... 27  
   4.1. Methodology ................................................................................................................... 27  
   4.2. Construction phase ......................................................................................................... 27  
      4.2.1. Air Quality .................................................................................................................. 27  
      4.2.2. Noise and Vibration .................................................................................................... 28  
      4.2.3. Soil and Groundwater Quality .................................................................................. 28  
      4.2.4. Waste Management ................................................................................................... 29  
      4.2.5. Occupational, Health and Safety ............................................................................... 29
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.6.</td>
<td>Land Use</td>
<td>30</td>
</tr>
<tr>
<td>4.2.7.</td>
<td>Employment and Procurement Opportunities</td>
<td>30</td>
</tr>
<tr>
<td>4.2.8.</td>
<td>Livelihoods</td>
<td>31</td>
</tr>
<tr>
<td>4.3.</td>
<td>Operation phase</td>
<td>31</td>
</tr>
<tr>
<td>4.3.1.</td>
<td>Air Quality</td>
<td>31</td>
</tr>
<tr>
<td>4.3.2.</td>
<td>Noise and Vibration</td>
<td>32</td>
</tr>
<tr>
<td>4.3.3.</td>
<td>Soil Quality and Water Resources</td>
<td>33</td>
</tr>
<tr>
<td>4.3.4.</td>
<td>Biodiversity</td>
<td>33</td>
</tr>
<tr>
<td>4.3.5.</td>
<td>Occupational, Health and Safety</td>
<td>34</td>
</tr>
<tr>
<td>4.3.6.</td>
<td>Employment and Procurement Opportunities</td>
<td>34</td>
</tr>
<tr>
<td>4.3.7.</td>
<td>Livelihoods</td>
<td>34</td>
</tr>
<tr>
<td>4.3.8.</td>
<td>Infrastructure</td>
<td>35</td>
</tr>
<tr>
<td>4.3.9.</td>
<td>Social Investment</td>
<td>35</td>
</tr>
<tr>
<td>5.</td>
<td>Stakeholder Consultations and Management of Grievances</td>
<td>36</td>
</tr>
<tr>
<td>5.1.</td>
<td>Stakeholder Engagement Plan</td>
<td>36</td>
</tr>
<tr>
<td>5.2.</td>
<td>Stakeholder Engagement During the Preparation of the ESIA</td>
<td>36</td>
</tr>
<tr>
<td>5.3.</td>
<td>Feedback from Local Community Stakeholders</td>
<td>37</td>
</tr>
<tr>
<td>5.4.</td>
<td>Key Future Engagement Activities</td>
<td>38</td>
</tr>
</tbody>
</table>
List of Tables

Table 1 List and description of the reconstruction and modernization sub-projects..........10
Table 3 Projection of passenger and air traffic to 2025.............................................13
Table 2 The Project schedule ......................................................................................14

List of Figures

Figure 1 Macro-location of the Belgrade Airport ............................................................ 9
Figure 2 Layout of the proposed development and existing buildings and infrastructure.....12
Figure 3 Local communities within the boundaries of Surcin municipality and New Belgrade municipality..........................................................................................................23
Figure 4 PDR green and yellow zones within the boundaries of the three settlements surrounding BA.................................................................................................................24
1. Introduction

1.1. Background

VINCI Airports SAS, concessionaire of the Belgrade airport, is undertaking reconstruction and modernisation of the airport (hereafter referred to as “the Project”).

The government of the Republic of Serbia signed a 25-year concession agreement with VINCI Airports SAS on March 22, 2018, for the financing, development through construction and reconstruction, maintenance and management of the airport infrastructure.

Belgrade Airport Ltd Beograd (a subsidiary of VINCI Airports SAS, “the Client” or “BA”), operator of the airport, contracted environmental consultancy firm ENVICO Ltd Belgrade to develop Environmental and Social Impact Assessment (ESIA) for the Project in line with the International Finance Corporation (IFC) Performance Standards and European Bank for Reconstruction and Development (EBRD) Performance Requirements. For addressing social components of the Project, BA engaged a separate team of social consultants from Belgrade (LINK 011), whose work was incorporated into the Project ESIA.

This document presents Non-Technical Summary (NTS) of the ESIA developed for the Project.

1.2. Purpose of the Document

The ESIA for the Project is carried out in order to understand the environmental and social sensitivities associated with the airport development, impacts to be generated and to identify relevant mitigation measures to be implemented in order to avoid adverse impacts during the Project’s lifecycle.

The purpose of the NTS is to provide the public with simplified and accessible general information on the Project and outcomes of the completed ESIA and mitigation measures that will be undertaken by BA.

The document presents the Project, its key environmental and social impacts and planned mitigation and enhancement measures, as well as the proposed set-up for stakeholder engagement and management of grievances during the construction and operation of the Project.
1.3. Availability of the NTS for Review and Questions

This Non-Technical Summary (NTS) is available for review on the BA website: https://beg.aero/eng/node/444.

Hard copies of the document are available in the Municipality of Surčin (front desk, address: Vojvodanska 79, 11271 Surčin).

Hard copies can also be obtained directly from BA, using the following contact details:
Contact person: Katarina Glomazić, Request Manager
Belgrade Airport Ltd Beograd
Address: Aerodrom Nikola Tesla, 11180 Beograd 59, Serbia
Phone (from 8:00 to 16:00 on work days): +381 60 830 1596
e-mail: zainteresovane.strane@beg.aero

The same contact details may be used to submit any questions or comments on the NTS or request any additional information, as well as to formally submit opinions, concerns and grievances in relation to the Project.
2. Summary Description of the Project

2.1. Project Location

The Belgrade Airport is situated between the highway E-70 (European route), and the semi-urban and urban settlements Surcin and Novi Beograd to the south and southwest, respectively and Radiofar to the northeast and approx. 19 km from the Belgrade city centre.

There are several residential settlements nearby, the closest being eastern part of Surcin which is located adjacent to the southeast end of the runway (approximately 380 m to the nearest residential housing). Another adjacent settlement is the Belgrade suburb of Radiofar, which is located between the airport and the highway E-70, approximately 320 m to the north side of the runway. Other nearby settlements are the Belgrade suburbs of Ledine and Bezanjska kosa to the southeast and east, respectively and Dobanovci to the northwest.

The area of the airport is approximately 400 ha. The site is mostly surrounded by agricultural land comprised of large fields, planted with seasonal crops. There are no industrial facilities in the proximity of the airport.

Figure 1 shows Macro-location of the Belgrade Airport.

2.2. Project Description

The main aim of the Project is to increase capacity (air traffic and passenger). The project includes reconstruction or expansion of existing structures and facilities as well as new construction, which in general comprises of:

- An integrated terminal operations concept with increased capacity (extension and reorganization of the terminal, extension of the piers) and improvement of an overall setting within the terminal,
- Airside\(^1\) works with additional aircraft stands, a new inserted runway, new taxiways and rehabilitation of the existing runway,
- Increased car parking capacity, and
- Construction of new utilities and facilities such as a new wastewater treatment plant, heating plant and photovoltaic plant.

In line with the Concession Agreement (CA), the reconstruction and modernization of the airport, comprises of 17 sub-projects presented in Table 1.

Figure 2 shows layout of the proposed development and existing buildings and infrastructure.

---

\(^1\) Airside works are works that will be carried out within the airport area beyond passport and customs control, i.e. restricted access area.
Figure 1 Macro-location of the Belgrade Airport
(Source: Google Earth)
## Table 1 List and description of the reconstruction and modernization sub-projects

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-project</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Construction of Inserted runway (BCIR)/and reconstruction of the existing runway</td>
<td>The planned BCIR will be 3,500 m in length and 60 m wide, situated between the existing runway and taxiway. The BCIR will be constructed so it could receive incoming and outcoming air traffic during the planned reconstruction of the existing runway. After completion of works at the existing runway, the BCIR will act as a new parallel taxiway. However, it will keep its status as an emergency runway in case the main runway will be blocked for any reason or undergo repair work.</td>
</tr>
<tr>
<td>2.</td>
<td>Extension and refurbishment of Terminal Phase 2</td>
<td>Reconstruction and new construction of the Terminal building and extension of Pier C.</td>
</tr>
<tr>
<td>3.</td>
<td>Reconstruction of Pier C - Extension and refurbishment of Terminal Phase 2</td>
<td>The reconstruction and extension of the Apron B will increase the capacity of the Apron area for the inclusion of one additional aircraft parking lot (there will be a total of 8). The Project involves construction of a service route (8 m wide) for aircraft service vehicle traffic. Apron B will be used for passengers boarding and disembarking, transfer of supplies (fuel, lubricants, food, beverages, cargo/luggage transport and other passenger supplies), as well as the parking and maintenance of aircrafts.</td>
</tr>
<tr>
<td>4.</td>
<td>Reconstruction of the Apron B</td>
<td>The Apron C will be extended in order to facilitate additional aircrafts that will be docking due to the Pier C extension. The extension will be conducted in two phases with the first phase covering an area of 19,848 m². As the part of the sub-project, new 91 m long perimeter road will be constructed. Due to the vicinity to the Apron C, de-icing platform and adjacent retention pond will undergo reconstruction.</td>
</tr>
<tr>
<td>5.</td>
<td>Reconstruction of the Apron C / De-icing pad</td>
<td>The Apron will cover an area of approximately 24,000 m² (103 x 233 m) and will be paved in asphalt. Apron E will be used for passengers boarding and disembarking, supply transfer (fuel, lubricants, food, beverages, cargo/luggage transport and other passenger supplies), as well as the parking and maintenance of aircrafts.</td>
</tr>
<tr>
<td>6.</td>
<td>Reconstruction of the Apron E</td>
<td>The terminal is used for the transfer of passengers between ground transportation and the facilities that allow them to board and disembark from aircrafts. During phase 1 new construction</td>
</tr>
<tr>
<td>No.</td>
<td>Sub-project</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>8.</td>
<td>Construction of New heating plant and associated utilities</td>
<td>(extension) area of 19,830 m² will be added, while the reconstruction of existing area will cover 17,100 m². The new natural gas fired heating plant is foreseen for combined production of hot water for the heating system and electricity. Three natural gas fired boilers (2 x 16.2 MW and 1 x 10 MW) for hot water production are foreseen. In addition, a combined heat and power (CHP) unit will also be installed, which will combust natural gas to produce heat (1.6 MW) and electricity. The total thermal power of the new heating plant is 44 MW.</td>
</tr>
<tr>
<td>9.</td>
<td>Construction of Wastewater treatment plant and associated utilities</td>
<td>The function of the WWTP will be treatment of sanitary wastewater from the terminal building and sanitary wastewater generated by commercial aircraft operations.</td>
</tr>
<tr>
<td>10.</td>
<td>Construction of Solid waste treatment plant - Airside and associated facilities</td>
<td>The solid waste facilities (SWF) airside will be used for a temporary storage of municipal solid waste, sorting, compacting and storage of recyclables from aircrafts and airside facilities (Apron E, Apron B, BCIR, and oth.).</td>
</tr>
<tr>
<td>11.</td>
<td>Construction of Solid waste treatment plant - Landside and associated utilities</td>
<td>SWF landside is facility intended for the manual sorting and compacting of solid non-hazardous waste from terminal building and other landside objects (WWTP, Heating plant and other) and its temporary storage.</td>
</tr>
<tr>
<td>12.</td>
<td>Photovoltaic plant and associated facilities</td>
<td>A photovoltaic plant will be constructed within the airport complex with a power of 1 MWp generating around 1.2 GWh of electricity per year.</td>
</tr>
<tr>
<td>13.</td>
<td>Construction of Site installation - Landside</td>
<td>At the airport complex, two supporting sites have been constructed. One which will support construction of the landside facilities and one which will support construction of the airside facilities. At the two sites temporary offices will be installed, parking lots for construction machinery, storages for construction and excavated material, canteen and sanitary facilities for employees and maintenance workshops.</td>
</tr>
<tr>
<td>14.</td>
<td>Construction of Site installation - Airside</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Construction of Remote car park – Roundabout</td>
<td>Remote car park with 1,350 parking spots will be constructed. Roundabout will also be constructed which will connect car park with Vojvodanska Street.</td>
</tr>
<tr>
<td>16.</td>
<td>Construction of Transformer substation</td>
<td>Transformer substation will be constructed in the southeast part of the airport complex.</td>
</tr>
<tr>
<td>17.</td>
<td>Construction of Contact car parks / Curbside viaduct</td>
<td>Project will involve reconstruction of visitors’ parking lots and passageways connecting parking lots with the terminal building.</td>
</tr>
</tbody>
</table>
Figure 2 Layout of the proposed development and existing buildings and infrastructure
2.3. Project Activities

2.3.1. Construction phase

Project has commenced in December 2018 and is expected to be completed by Q1 2024. The general schedule of activities is presented in Table 3. As it can be seen from the Project schedule some of the sub-project developments are overlapping or running concurrently.

Main activities that will be conducted during the construction phase are typical for this kind of project and include:

- Demolition of existing facilities/infrastructure;
- Earthworks (excavation, transport and storage of soil);
- Handling and storage of aggregate and other construction material onsite;
- Transport of heavy machinery and construction material to and from the site;
- Drainage of construction sites/storm water management;
- Generation and management of hazardous and non-hazardous waste;
- Foundation and structure construction;
- Dismantling of the support facilities (airside and landside) and rehabilitation of storage areas following the construction completion.

Engineering, Procurement and Construction (EPC) contractor for the Project is VINCI-TERNA JV. Currently, in terms of the workforce, there are approx. 1,000 workers engaged, while by the end of the construction that number may reach 1,800. There will be no workers’ accommodation at the site.

2.3.2. Operation phase

As mentioned above, the main aim of the Project is to allow the increase in capacity to happen (through improved infrastructure, i.e. reconstruction of existing and construction of new facilities). In the table below, data on realised air and passenger traffic for 2018 and 2019 as well as projections to 2025, in terms of the expected increase in traffic, is presented. In 2025, an increase of 34 % in passenger and 18 % in air traffic, when compared to 2018 is expected.

Table 2 Projection of passenger and air traffic to 2025

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of LTO</th>
<th>Number of passengers</th>
<th>Realised/Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>67,460</td>
<td>5,641,105</td>
<td>Realised</td>
</tr>
<tr>
<td>2019</td>
<td>70,365</td>
<td>6,159,000</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>71,231</td>
<td>6,276,485</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>73,836</td>
<td>6,699,965</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>75,482</td>
<td>7,123,302</td>
<td>Estimated</td>
</tr>
<tr>
<td>2023</td>
<td>77,944</td>
<td>7,521,901</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>80,109</td>
<td>7,892,324</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>82,837</td>
<td>8,251,896</td>
<td></td>
</tr>
</tbody>
</table>
Table 3 The Project schedule

<table>
<thead>
<tr>
<th>No.</th>
<th>Project</th>
<th>Timeline</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of Inserted runway (BCIR)</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td></td>
<td>Reconstruction of the existing runway</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>2</td>
<td>Reconstruction of the Passenger Terminal Building and Extension and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>refurbishment of Terminal Phase 2</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>3</td>
<td>Reconstruction of the Passenger Terminal Building - Pier C and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extension and refurbishment of Terminal Phase 2</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>4</td>
<td>Reconstruction of the Apron B</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>5</td>
<td>Reconstruction of the Apron C</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td></td>
<td>Reconstruction of the De-icing pad</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>6</td>
<td>Reconstruction of the Apron E</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>7</td>
<td>Reconstruction of the Passenger terminal building Phase 1</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>No.</td>
<td>Timeline</td>
<td>Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
<td><strong>2021</strong></td>
<td><strong>2022</strong></td>
<td><strong>2023</strong></td>
<td><strong>2024</strong></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NTS - ESIA of Reconstruction and Modernisation of the Belgrade Airport
2.4. Project Policy and Regulatory Framework

VINCI Airports SAS is committed to managing business activities to reduce risks for environment and communities. VINCI AirPact policy (2015) encompasses main goals and objectives on the company level in terms of environmental protection related to greenhouse gases (GHG) emissions, energy consumption, biodiversity, contamination prevention, reduction in natural resource consumption, environmental management system, noise and waste management. The Project will comply with the applicable Republic of Serbia environmental and social laws, by-laws, and standards.

Further the project will be guided by International Finance Institutions’ requirements, namely:
- IFC’s Performance Standards (PSs) on Environmental and Social Sustainability (2012);
- EBRD’s Performance Requirements (PRs) - Environmental and Social Policy (ESP), 2019.

2.5. Airport Safety Protection Zones

2.5.1. Plan of Detailed Regulation

A key document influencing the development of the ESIA in several ways, is the Plan of Detailed Regulation (PDR) for the airport and surrounding area. The development of the PDR is a requirement under Serbian legislation and its aim is to define the purpose, capacity and content of the airport complex to correspond to development needs of the airport, define public interest, create planning opportunities and secure the technical infrastructure capacities for the planned construction, as well as to determine the airport protection zone. It should be noted that the PDR is a development document of local authorities, for which they hold full responsibility. The document was developed by the Belgrade Urban Planning Institute, founded by the Belgrade City Assembly. Upon a public presentation and consultation process, which was carried out in line with local legislation, the PDR was adopted by the Belgrade City Assembly.

A part of the PDR encompasses the current complex of the airport and how it will be developed, covering approximately 390 ha. This part of the PDR is based on inputs from the Belgrade Airport Master Plan, which was developed by BA and approved by the Government of Serbia on July 11, 2019. Other parts of the PDR (another 1,480 ha), including the construction of a new runway planned for after 2043, are developed based on other local development plans of relevant government authorities and are not considered further in the ESIA, as they are not related to the Project.

A key issue of interest for understanding impacts on local communities, is how the PDR determines and defines safety protection zones and how these will impact structures located in the vicinity of the airport. The PDR notes that on (previously) agricultural land near the airport, including in the areas that extend from the runway, a lot of illegal structures
(constructed without a permit), mainly residential, have been constructed in the past several decades. These structures belong to one of two zones, as defined by the PDR – green and yellow (see Figure 4). The green zone is the airport protective belt, defined as the area where no structures should exist, to protect operation of aircrafts. This protective belt was defined in the PDR based on inputs provided by the Civil Aviation Directorate of the Republic of Serbia. The yellow zone is the area of spontaneous construction, in which structures which are not already legal, may be legalised retroactively, provided they fulfil general legalisation requirements and obtain a certificate of approval from the Civil Aviation Directorate that they do not endanger the safety of aircrafts. No new structures may be constructed in the yellow zone.

According to the PDR maps, 54 structures to the south of the existing runway and 17 to the north of the runway are located in the green zone, where no structures should exist. Through discussions with the Mayor of Surcin and members of the New Surcin local community, it was determined that the number of affected structures is higher, as more have been constructed since the time when maps, used for the PDR development, were prepared. In New Surcin, located to the south of the runway, a census of affected structures and people was carried out, according to which an additional 42 structures exist in the affected location. This number, together with the 54 already recognised on the PDR map, suggests that at least 96 structures are affected. In New Surcin there are also an estimated 54 locations where construction of new structures has already started or is planned to begin.

In discussions with the Mayor of Surcin, he expressed that the municipality is satisfied with the fact that the new PDR provides a basis for the legalisation of at least 1,600 structures which were previously not eligible to apply for legalisation, as they were located within previously defined airport protective zones. However, the municipality also believes that the eligibility of structures to apply for legalisation, which are located in the newly defined PDR green zone (airport protective belt), should be further re-examined, taking into account recent technological advancements and current safety requirements for aircraft operations. He requested assistance from Belgrade Airport in advocating with the Civil Aviation Directorate of the Republic of Serbia whose mandate is to determine safety requirements for aircraft operations, as well as with the Grantor, i.e. the Government of Serbia, for re-examining the airport protective zone and determining if additional structures may be eligible to apply for legalization, provided they do not endanger the safety of aircraft operations.

2.5.2. Aircraft Crash Risk Assessment

Although not legally required, however, in line with good industry practice, BA commissioned a study on assessing the current and future third-party risks to the public associated with potential aircraft crashes in the vicinity of Belgrade Airport and ensuring that they are at an acceptable level (Assessment of the Public Safety Zone for Belgrade Airport, from March 13, 2020, developed by Atkins Limited).
The study is based on the approach adopted by the UK where public safety zones are defined as: “areas of land at the ends of the runways at the busiest airports, within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident on take-off or landing”. The basic policy objective governing the restriction on development near civil airports is that there should be no increase in the number of people living, working or congregating in Public Safety Zones and that, over time, the number should be reduced as circumstances allow.

The public safety zone around Belgrade Airport, where, according to the study, further development should be controlled, extends into parts of Surcin and New Belgrade municipalities. At the south eastern end of the runway, the boundaries of this zone are consistent with the boundaries of the yellow zone defined by the PDR, in which no new developments will be allowed. However, at the north western end of the runway, the boundaries of this zone extend into areas where the current PDR allows development of future commercial activities, which, if developed, would not be consistent with good industry practice.

As mentioned above, this study was prepared in line with internationally recognised good industry practice and not in response to any local legislative requirements, which is why its results are not legally binding. The study was also developed after the finalisation of the PDR and could not influence it in any way. However, it’s results may be used as guidance, to enhance future land use planning in areas around BA, especially concerning the development of future commercial areas at the north western end of the runway.
3. Environmental and Social Baseline Conditions

This section briefly provides environmental and social baseline information related to the Project Area of Influence and describes the current status and value of the environmental setting. This characterisation is essential, as it is used for the assessment of the Project’s potential impacts and the subsequent development of appropriate mitigation measures.

3.1. Environmental Baseline Conditions

3.1.1. Land Use

The airport is mostly surrounded by agricultural land comprised of large fields, planted with seasonal crops. The airport had been located at the current location since 1960’s. In addition, the area around the airport has been used for intensive agricultural activities for the last one century.

The Plan for Detailed Regulation (PDR) for the Airport Complex (Decision published in the “Official Gazette of the City of Belgrade” No. 36/2020) was enacted, which more closely regulates land use at the airport location and wider area by defining public interest, creating planning opportunities and securing the technical infrastructure capacities for the planned construction, as well as to determine the airport protection zone. In general, the land use has been assigned for economic and trade area, commercial content, public traffic areas, and residential housing and protection zones.

3.1.2. Air Quality

The recent monitoring of pollutants in the ambient air performed in 2019, in the vicinity of the nearest residential houses in Radiofar and Surcin, showed there are no exceedances of the relevant limit values.

3.1.3. Noise and Vibration

The most significant sources of noise and vibrations from airport operations are aircraft during the landing and take-off (LTO) cycles, followed by a variety of ground operations equipment. In 2018, the BA commissioned the study regarding initial assessment of current noise levels as well as noise impacts from the operations of the future inserted runaway. The results of the study indicate that, in 2016 999 people in 342 households were exposed to elevated noise levels between 65 and 74 dB, while 34,000 people were impacted by noise exceeding 55 dB.
3.1.4. Soil and Groundwater Quality

In January and June 2019, extensive soil and groundwater sampling and analysis was conducted at the airport location. No indication of significant pollution requiring remediation was found.

3.1.5. Surface Water Quality

The nearest river Sava is located some 4 km from the southeast end of the runway. The closest artificial surface water body is melioration canal Galovica, which flows about 2.5 km south of the Project site. Storm water from the airport complex is discharged into Galovica canal which inflows into Sava river. In line with the available designs, the stormwater drainage channels with oil separator will be installed for storm water treatment. Further, wastewater treatment plant will be constructed which will treat sanitary wastewaters from objects within BA complex part of the concession agreement and wastewater from aircrafts. In this way, currently elevated concentrations of hydrocarbons and coliforms will be brought below applicable limit values. In addition, BA is currently performing works on identification of all wastewater streams (surveying underground installation, etc.), so all streams are accounted for and are subjected to relevant treatment.

Surface water sampling and analysis of the Galovica channel was carried out in January 2020. Monitoring results showed that the measured parameter concentrations did not exceed limit values for class II water quality (required class for Sava River), except for the electrical conductivity.

3.1.6. Biodiversity

The nearest protected natural area is the Nature Reserve “Veliko Ratno Ostrvo” on the Danube River, a bird and wetland protected area, some 10 km northeast from the airport and protected habitats of water fowl and fungi some 6 km to the southeast on Ada Ciganlija, protected habitat Great Swamp (“Veliko blato”) 15 km northeast and Special Nature Reserve the Obed swamp (“Obdaska bara”) 26 km west from the Project.

There are no protected and registered natural resources, endangered plant and animal species, as well as areas with high quality biological resources that may be affected by the airport operations.

Vegetation within and in the vicinity of the airport is scarce and isolated due to the uses of the area for intensive agriculture and airport infrastructure. Within the airport location the elements of natural vegetation are hardly present, while the area beyond the borders of the

---

2 Natural class II water quality could be used for swimming and recreation, water sports, breeding of certain fish species and, after being processed with conventional methods (coagulation, filtration, disinfection, etc.), it can be used for drinking or in food industry.
airport is mostly occupied by agricultural crops. It can be concluded that the area is completely homogeneous and poor in vegetation.

In terms of fauna, it is estimated that around 210 bird species are permanently or occasionally present in the wider zone (13 km radius) of the airport, while 113 species are present in the narrow zone (7 km radius), out of which 24 species belong to the group of protected species, while the other 89 belong to the group of strictly protected species.

The narrower and wider zone of the airport accommodates about 65 species of mammals. The most common are rodents (Rodentia) with 22 species, followed by bats (Chiroptera) with 19 species and beasts (Carnivora) with 11 species.

3.2. Socio-Economic Baseline Conditions

3.2.1. Baseline Collection Methodology and Constraints

Baseline information for the social impact assessment was collected from various publicly available documents, particularly the latest population census carried out in the Republic of Serbia in 2011, as well as more recent studies carried out by the Statistical Office of the Republic of Serbia.

Meetings with various stakeholders were also organised during the development of the ESIA study, although there were several constraints that needed to be overcome during this process. Work on the social impact assessment began as early as March 2019, however the disclosure and consultation process of the draft PDR, a key event which was to take place before any further meetings with stakeholders directly in connection to the Project, i.e. the disclosure and consultation of the draft PDR, was delayed. As explained in section 2.5.1 of the NTS, the PDR is a document developed in accordance with national legislation, under the responsibility of Belgrade City authorities and not BA, and it covers an area much larger than the boundaries of the existing airport. Consequently, the PDR disclosure and consultation process were managed by the relevant authorities and was not a stakeholder engagement activity of the Project. Nevertheless, feedback from interested stakeholders on the PDR which pertained to the Project, was used to inform the Project ESIA.

The PDR disclosure and consultation is process was finally completed in February 2020 and BA planned to initiate specific, Project related, engagement activities. However, soon after, the COVID 19 pandemic prevented any larger gatherings. Planned engagement activities were modified and nevertheless, BA, together with social consultants engaged with stakeholders, whenever external circumstances allowed this, in compliance with the prescribed Covid 19 prevention measures. More information about the meetings is provided in section 5 of this document.
3.2.2. Study Area (Area of Influence)

The primary area of influence considers all Project impacts on local resources and receptors and it is the focus of the impact assessment. It encompasses the Project site (Belgrade Airport) located in the north eastern part of Surcin municipality. It also encompasses the local communities surrounding and closest to the Project site and the municipalities within which these local communities are located. The local communities are: Radiofar (closest residences are 300 m to the north of the runway) and New Surcin (closest residences are 400 m to the south of the runway), both territorially belonging to Surcin municipality, and Ledine (closest residences are 800 m to the southeast of the runway), territorially belonging to New Belgrade municipality (see Figure 3 and Figure 4).

The secondary area of influence considers larger scale economic and infrastructure impacts on a wider, regional level. This area comprises Belgrade City. The tertiary area of influence considers Project impacts on a national scale.
Figure 3 Local communities within the boundaries of Surcin municipality and New Belgrade municipality
(Source: LINK 011)
Figure 4 PDR green and yellow zones\(^3\) within the boundaries of the three settlements surrounding BA
(Source: LINK 011)

\(^3\) The green zone is defined in the PDR as the airport protective belt, in which no structures should exist. The yellow zone is defined in the PDR as the area of spontaneous construction, in which existing structures may remain, provided they are legalised, however no new structures should be built. See section Error! Reference source not found. for more information.
3.2.3. General Local Context

Belgrade Airport is located in Surcin municipality, within the City of Belgrade, approx. 19 km from the city centre and it is surrounded by Novi (New) Surcin and Radiofar, both territorially belonging to Surcin municipality and Ledine, territorially belonging to New Belgrade municipality.

The municipalities, Surcin and New Belgrade, are among a total of 17 City of Belgrade municipalities. While New Belgrade is among the ten central, urban municipalities, Surcin is one of the three rural municipalities, where the population density is less than 150 inhabitants per km². New Belgrade is the largest municipality in Belgrade with over 200 thousand inhabitants, while Surcin has four times less inhabitants (46,000). Surcin is the youngest Belgrade municipality, formed in 2004 as it was separated from the municipality Zemun and in line with its rural character, is partly characterised by agricultural activity. In contrast to that, New Belgrade is an urban area of the city characterised by highly qualified human resources, good infrastructure and available construction land, all attracting new investments and rapidly growing into a business and financial centre of Belgrade, but also the region.

Ledine settlement was formed around 1961, following the relocation of residents of an illegal settlement in the old part of Belgrade, as the city prepared for the organisation of the first conference of the Non-Aligned Movement. According to some sources, at that time, the new resettlement location was well prepared with appropriate infrastructure, however, over the years, the settlement grew in an unplanned and uncontrolled manner and the necessary infrastructure did not follow. The first (old) part of the settlement is on the right side of the road connecting Surcin with Belgrade, which is the side opposite of the airport. Over time, the settlement grew on the other side of the road, towards the airport and the houses in that location are of a better quality, although infrastructure is seriously lacking.

Radiofar settlement was formed during the 1970s and was initially completely a weekend settlement. As Belgrade City expanded and with the influx of refugees from Croatia and Bosnia & Herzegovina, during the 1990s, the settlement began being populated by permanent residents, who bought existing houses or constructed new ones. Most of the difficulties for this settlement relate to lack of infrastructure and difficult access to the settlement, which can only be accessed from the E-70 highway.

New Surcin represents a mix of households of refugees from Croatia and Bosnia & Herzegovina, or even more so, their descendants, internally displaced households from Kosovo and Metohija and members of the local population. During the 1990s, as people fled from their homes in other parts of Yugoslavia, many inhabited these locations, where land, at that time, could be bought at relatively low prices and began building their new homes, most often with no permits. Since then, the homes have improved in quality and many have submitted legalisation requests (with some already legalised), and new houses and even small apartment

---

4 Organisation for Economic. Cooperation and Development (OECD) definition of rural areas.
buildings, continue being built. However, there are still difficulties with infrastructure, which needs to be improved to ensure better living conditions for all.

The total estimated population of the three local communities surrounding Belgrade Airport, New Surcin, Radiofar and Ledine, is around 15,000.
4. Environmental and Social Impacts and Mitigation Measures

4.1. Methodology

The impact assessment followed generally accepted methodology which involves impact prediction, impact evaluation, mitigation and residual impact evaluation.

The identification and assessment of potential impacts was performed based on analysis of:
- the baseline conditions of the environmental and social aspects,
- the planned project activities that represent a source of impact,
- the concerns and expectations raised by stakeholders in relation to the project.

For each identified impact, mitigation measures to avoid, reduce and manage the potential adverse impacts or enhancement measures to increase positive impacts were identified. These measures will be further translated in more detailed management plans during the project construction and implementation.

The impact assessment considered the following environmental and social aspects:
- Air Quality,
- Noise and Vibrations,
- Soil Quality,
- Water Resources,
- Waste Management,
- Resource Efficiency,
- Biodiversity,
- Cultural Heritage,
- Occupational Health and Safety,
- Transport and Traffic Management,
- Land Use,
- Employment and Procurement Opportunities,
- Livelihoods,
- Community Health and Safety and Security,
- Infrastructure.

The NTS presents only main anticipated impacts and some of the main proposed mitigation measures.

4.2. Construction phase

The following environmental and social key impacts during the construction phase were identified.

4.2.1. Air Quality

During construction main impacts to air quality will come from construction equipment operation and traffic movement, namely:
- Exhaust emissions NOx, CO, CO2, VOC, SOx and PM;
- Fugitive dust emissions caused by earthworks, exposure of bare soil and soil piles to wind and traffic movement on unpaved roads.

To minimize the level of air pollution the Project will make sure that:
- Construction Environmental and Social Management Plan is developed and implemented;
- Construction equipment is maintained to good standards;
- Speed limit is set and obeyed;
- Water is sprinkled periodically when operations are under way to prevent raising of dusts;
- Usage of covers for transportation trucks;
- Visual monitoring for dust emissions is performed daily to ensure compliance or trigger further mitigation measures.

4.2.2. Noise and Vibration

During construction main impacts on environmental noise will come from operation of vehicles, machinery and other equipment during construction activities which will increase levels of noise and vibration already present at the location.

Measures to be taken by the Project to minimize noise shall include:
- Regular maintenance of construction equipment in line with the manufacturer’s recommendations;
- Use noise control devices, such as temporary noise barriers and deflectors (where applicable) towards sensitive receptors;
- Limit the hours of operation for specific pieces of equipment or operations, especially mobile sources operating through community areas;
- Noise monitoring when construction works are being performed in the vicinity of sensitive receptors.

4.2.3. Soil and Groundwater Quality

Activities such as earthworks, storage and handling of fuel and chemicals, hazardous waste management and construction equipment operation will lead to:
- Disturbance of top soil,
- Certain level of soil degradation and erosion,
- Potential soil and groundwater contamination in case of accidental spill of fuel, oil, chemicals or hazardous waste from storage and handling or malfunction of construction vehicles;

To mitigate these impacts, the Project shall:
- Timely and carefully remove and properly store top soil and re-use it for rehabilitation of construction site;
- Provide adequate drainage systems to minimize and control water infiltration;
Provide adequate storage for chemicals, fuel and hazardous waste with impermeable floor and secondary containment;

Provide spill kits at the areas with increased risk of pollution;

Make sure that above and under storage tanks are double walled and undergo regular technical inspections.

4.2.4. Waste Management

Hazardous and non-hazardous waste will be generated during construction activities. Improper waste management may lead to:

- Deterioration of ground or surface water quality resulting from the improper storage at the site;
- Impacts on local communities in terms of nuisance, caused through increased vehicle traffic;
- Health related impacts on employees as a result of improper handling, storage and disposal of waste;
- Impact on air quality.

To prevent impacts that may arise from the improper waste management the Project shall:

- Perform waste management trainings for employees;
- Ensure adequate storage for all waste streams in line with the relevant regulations. Hazardous waste storage will be fenced, roofed, with impermeable surface and secondary containment for liquid hazardous waste;
- Waste should be handed over to licensed and authorized companies for further treatment or disposal;
- Avoid disposal at facilities which do not meet criteria set by the relevant regulation;
- Transportation of waste shall be carried out in dump trucks with a closed canvas top, in order to avoid dusting, spills and losses on the route.

The listed set of measures will be applicable for operational phase as well.

4.2.5. Occupational, Health and Safety

The OHS hazards are typical for this type of construction site. Activities related to construction equipment and heavy vehicle operation, waste handling and storage, working at heights, construction traffic, storage and use of fuels may have impact on workers’ health or lead to injury or even fatality.

To mitigate the risks the Project shall ensure:

- Health and Safety management plans are developed and fully implemented;
- Appropriate personal protective equipment is provided;
- Provision of risk assessment for every job position;
- Provision of OHS trainings as well refresh trainings as required;
- Traffic regulations are adhered to;
- Implement proper housekeeping;
- Additional precautions when managing asbestos containing materials (ACM) and other hazardous material.

4.2.6. Land Use

Most of the project components are being implemented on land that is located within the airport complex and was previously either unused land or had facilities on it that will be refurnished as part of the Project. In addition, around 62 Ha of land previously acquired by the airport, but which was not fenced and was open to public access, will no longer be available for use.

Belgrade Airport plans to use additional land in 2027 for further developments. This land will be acquired by the State through expropriation. A maximum of 34 ha, which are currently used for agriculture, are planned for acquisition. There are no structures or other assets present on these land parcels. A Land Acquisition and Compensation Plan will be developed by Belgrade Airport towards the end of 2024 to address this land acquisition and any associated loss of livelihoods, as required by IFIs.

4.2.7. Employment and Procurement Opportunities

The workforce needed during the construction phase is being sourced locally from Belgrade City, nationally and internationally.

At the time of developing this report, construction has started for seven out of 17 subprojects. The EPC contractor is employing 188 individuals, of whom 31 are women (approx. 16 %), comprising 29 international staff and 159 Serbian nationals, of whom 132 are residing in Belgrade City (this includes international staff as well) and 56 are residents of other municipalities in Serbia. In Belgrade City, 29 individuals are residents of New Belgrade. An additional 15 workers are residents of Surcin municipality.

In addition to the EPC contractor’s workers, an additional 810 workers of subcontractors, of whom 39 are women (approx. 5 %), are engaged on the project. Women are employed as office staff (28), as cleaning staff (9) and as workers in the field (2). Of the 810 workers, 320 are residents of Belgrade. A total of 40 employees are residents of New Belgrade and 20 are residents of Surcin municipality. The rest are residents of other parts of Serbia and there are no international workers. According to current estimates from the EPC contractor another 100 workers are expected to be hired during peak construction, bringing the number to 900 workers. Some indirect employment opportunities will be created in connection to the Project’s supply chain (goods and services) and the spending of non-resident workers in the area (shops, cafés).
Overall, the impacts of short-term employment and procurement opportunities are regarded as negligible at the level of Belgrade City and Serbia as a whole, however the impacts are significant for those who are employed and their households.

To maximise benefits for the local population BA and its subcontractors will aim to encourage local employment and procure goods and service locally whenever possible. Recruitment will be transparent and fair and national and international standards in employment will be abided by.

4.2.8. Livelihoods

Any land not belonging to BA, disturbed during construction will be fully re-instated by the construction contractors. In addition, if any damages to crops or other assets occur, they will be compensated to the owners of such assets, at full replacement value. Grievances can be submitted to BA through the grievance management procedure and they will be addressed by BA.

Businesses operating at the airport will be subjected to changes during the reconstruction works on the terminal building. Businesses may need to be temporarily relocated to another part of the terminal building or they may be forced to reduce their capacity due to limited space during construction. These temporary changes, along with construction related nuisances, could cause business operations to be impacted and further impact livelihoods, of business owners and employees. Impacts on livelihoods will be explored in greater detail and if needed, a Livelihood Restoration Plan will be developed by Belgrade Airport to address them, as required by IFIs.

4.3. Operation phase

The following environmental and social key impacts during the operation phase were identified.

4.3.1. Air Quality

During airport operation the main sources of air quality impact include:

- Emissions from fuel combustion from aircraft during landing and take-off (LTO) and ground operation (including auxiliary power units, APUs) and ground service vehicles (GSE);
- Emissions from natural gas fired heating plant;
- Odours from WWTP sludge treatment line and storage which can cause nuisance to workers and users of the surrounding airport facilities;
- Air emissions from wastewater treatment operations.

Some of the proposed mitigation measures that the Project shall implement include:

- Optimisation of aircraft ground traffic and ground service infrastructure in order to reduce taxiing and therefore reduce air emissions;
● Reducing time spent with aircraft engines idling;
● Implementation of the landing and take-off procedures that minimise air emissions;
● Natural gas combustion optimisation in heating plant in order to reduce air pollutant emissions;
● Ensuring appropriate covering/ventilation of the wastewater treatment plant pre-treatment unit and sludge storage;
● Ensuring proper and regular maintenance of process equipment (in line with manufacturer’s recommendations).

4.3.2. Noise and Vibration

The main impact and the most significant sources of noise and vibrations from airport operations are aircrafts during the landing and take-off (LTO) cycles, followed by a variety of ground operations equipment including aircraft taxiing; operation of ground support vehicles (e.g. passenger buses, fuel trucks, etc.). Operations of facilities such as heating plants, although in much lower degree than LTO cycles, are also sources that are adding to the increased noise levels.

Some of the proposed measures to mitigate these impacts include:
● Initiate implementation of the Noise Management System, including internationally recognised Balanced Approach to Aircraft Noise Management developed by the International Civil Aviation Organization (ICAO);
● Review take-off and landing routes;
● Review the flight zones and introduce more accurate methods and measures of aircraft control;
● The concessionaire shall actively engage with the Civil Aviation Directorate (CAD) and relevant Serbian authorities to develop a legal framework enabling the development and the implementation of a sound insulation plan for the affected households;
● Liaise with relevant authorities to initiate development of Strategic Noise Map for the airport;
● The Project will establish Environmental Advisory Committee (EAC) which will liaise with public and private stakeholders, whose scope will among others include airport noise;
● Apply noise protection screens and barriers, in case noise is attributed to airside or groundside operations;
● All ground support vehicles shall be maintained in good working condition as per manufacturer’s recommendations;
● All process equipment must conform with quality, technical safety and environmental requirements;
● Establish 24/7 noise monitoring system at the airport;
● Establish noise grievance mechanism.
4.3.3. Soil Quality and Water Resources

During operation of the airport, impacts on soil quality and water resources may be caused by:

- Accidental release of hydrocarbons during fuel transport, handling, and aircraft refuelling;
- Accidental release of hazardous waste and spills or leaks from chemical storage area;
- Uncontrolled contaminated stormwater runoff;
- Improper management of hazardous waste;
- Improper management of the de-icing platform;
- Usage of WWTP sludge and treated wastewater for soil fertilisation and green area irrigation when concentrations of pollutants exceed threshold values for reuse.

Some of the proposed measures to mitigate these impacts include:

- Provision of adequate storage for chemicals, fuel and hazardous waste with impermeable floor and secondary containment;
- Provide spill kits at high risk places in line with the Hazardous Materials Management and Spill Response Procedure;
- Ensure proper and regular maintenance of vehicles and other machinery (in line with manufacturer’s recommendations);
- Ensure adequate maintenance and regular checks of the storm water drainage systems;
- Enforce de-icing platform managing procedure and maintain de-icing facility in good condition;
- Sludge and treated wastewater should meet prescribed criteria (confirmed through laboratory analysis) prior to their reuse;
- Perform regular monitoring of soil quality, ground and surface water quality in line with the Environmental Monitoring Program.

4.3.4. Biodiversity

During operation of the airport, activities such as organic waste generation, use of pesticides, bird control may result in following impacts:

- Bird strike, as a result of increased birds’ presence;
- Loss of native species;
- Disturbance, loss of nests and shelter.

Some of the measures to mitigate these impacts include:

- Implementation of the Waste Management Plan;
- Implementation of bird strike prevention measures, in line with the Procedure for Work on Observation and Control of the Presence of Birds and other Animals;
- Use pesticides that target pest species, in line with Pesticide Management Plan;
- Implementation of the envisaged noise and air mitigation measures.
4.3.5. Occupational, Health and Safety

During operation of the airport, activities such as aircraft taxiing, operation of aircraft auxiliary power units (APUs), and ground service vehicles, process equipment operation, storage and handling of fuel, chemicals, and pesticides may lead to impacts including:

- Exposure to excessive noise of the ground service personnel;
- Injuries due to the improper handling and maintenance of process equipment;
- Injuries due to the improper handling of fuel, chemicals, and pesticides;
- Illness due to the exposure to pathogens and vectors in the WWTP.

Some of the proposed measures to mitigate these impacts include:

- Provision of adequate PPE (including personal hearing protection);
- Implementation of job rotation system;
- Perform regular occupational medical examinations;
- Follow manufacturer’s instructions during operation and maintenance of process equipment;
- Provide appropriate containment for storage and handling of hazardous materials;
- Maintain good housekeeping in sludge processing and storage areas;
- In WWTP perform equipment disinfection and maintenance to prevent growth and spreading of disease agents.

4.3.6. Employment and Procurement Opportunities

At the time of developing the ESIA, BA was employing 2059 individuals, of whom as high as 478 (23%) are residents of the municipality Surcin and 384 (19%) are residents of New Belgrade municipality. Unfortunately, due to the COVID-19 pandemic and the dramatic decrease in operations of the airport, plans for future employment have been put on hold.

To maximise benefits for the local population BA will aim to encourage local employment and procure goods and service locally whenever possible. Recruitment will be transparent and fair and national and international standards in employment will be abided by.

4.3.7. Livelihoods

As previously mentioned, businesses operating at the airport will be subjected to changes during the reconstruction works on the terminal building. However, for some businesses, the changes may be of a permanent nature, as their contracts with BA will not be renewed. The cancellation (or non-renewal of contracts) for businesses could cause impacts on livelihoods of business owners and employees. These impacts will also be assessed in greater detail in accordance with IFIs requirements, and if necessary, addressed through the development of a Livelihood Restoration Plan.
The increase in operations of the airport is likely to cause increased noise levels for an increased number of people living in local communities surrounding the project site. One of the ways in which noise impacts may be mitigated is the implementation of noise insulation measures in homes located in zones with increased noise.

The implementation of such measures is recommended by the PDR. However, if households are expected to finance the costs of these measures by themselves, with no support, it may be a significant impact on their budgets and livelihoods. Apart from implementing noise mitigation measures prescribed by the Balanced Approach to Noise Management Study, BA will cooperate with authorities and local communities through the Environmental Advisory Committee to identify ways in which households may be assisted to implement noise insulation measures. Grievances can be submitted to BA through the grievance management procedure and they will be addressed by BA.

4.3.8. Infrastructure

The upgrading of the BA surface water drain system and the controlled, as well as treated, discharge into the existing Galovica channel is expected to contribute to the reduction of the risks of flooding and damages to properties that run alongside this channel, as well as to improved water quality. In addition, to foster good relations with local communities, BA will engage with relevant stakeholders to ensure that the Galovica channel is regularly cleaned.

4.3.9. Social Investment

BA has allocated 5,000 EUR for the implementation of its corporate social responsibility programme in 2020 and intends to increase this amount in the years to come. BA will aim to direct this assistance mostly towards local communities surrounding the airport and will engage with them and the municipalities Surcin and New Belgrade, to develop a system for future social investments. A Social Investment Plan will be developed during 2020 and implemented from 2021.
5. Stakeholder Consultations and Management of Grievances

5.1. Stakeholder Engagement Plan

In parallel with the preparation of the ESIA, a Stakeholder Engagement Plan (SEP) was developed for the Project and is available on the BA website: https://beg.aero/sites/belgrade/files/pdf/belgrade_airport_stakeholder_engagement_plan_en_22.12.2020.pdf.

This document presents BA disclosure and consultation activities since the awarding of the concession, and those that BA plans to implement throughout the life of the Project. The document also includes a grievance management procedure and contact details for people to ask questions and raise any concerns about the Project. As the Project evolves, the SEP will continue to be periodically updated by BA to reflect new circumstances and announce newly planned engagement activities.

5.2. Stakeholder Engagement During the Preparation of the ESIA

In the ESIA preparation stage, BA has engaged with various stakeholders on different topics and in different ways. The key engagement activities were:

- BA participated in disclosure and consultation events in relation to the project, organised by relevant government authorities, particularly those that concern the development of the Plan of Detailed Regulation for the Airport and the Environmental Impact Assessments for the subproject Construction of a Heating Plant.
- During the summer and autumn of 2019, BA, with assistance of social consultants, engaged with the Mayor of Surcin and the persons who were informally using land needed for the construction of the remote car park and roundabout, to compensate their losses in relation to removed crops and to ensure that further use of land belonging to the airport does not continue.
- A number of meetings were held between BA (together with the social consultants) and the Mayor of Surcin in the first quarter of 2020, as well as two meetings with local communities New Surcin and Radiofar and three meetings with representatives of the local community Ledine and New Belgrade municipality during July and August 2020, for the development of the social baseline report.
- One public meeting with residents of the three affected local communities was held at the end of June 2020, where BA presented its development plans (including future planned land acquisition), the grievance mechanism and plans to cooperate with other
stakeholders to address environmental and social issues in relation to airplane and airport operations, through the forming and operation of an Environmental Advisory Committee.

- BA, together with consultants working on the Balanced Approach to Noise Study, engaged with key stakeholders, including Air Serbia, SMATSA, Civil Aviation Directorate, Ministry of Construction, Transportation and Infrastructure, Ministry of Environment and Ministry of Labour, for initiating the development of the Balanced Approach to Noise Action Plan.
- BA and the EPC contractor have each appointed a Grievance manager, whose contact details have been made available on announcement boards at construction sites and to the municipality Surcin, which has distributed them further to local residents. These grievance contact details have been further publicised in the Project SEP. The Grievance manager is recording all received requests and grievances in a grievance log and is cooperating with relevant departments to address the issues and inform the person who submitted the request/grievance about the outcome.

5.3. Feedback from Local Community Stakeholders

The main feedback from local communities in relation to the airport and its operations, from all of the above listed meetings was as follows:

- The main topic of concern for New Surcin settlement is the inability for a significant number of households to legalise their homes, located in the green zone, defined by the PDR. The same concern was expressed by Radiofar, however, to a lesser degree, as it affects only 17 houses located in the green zone. Both communities are aware that this issue is not under the direct mandate of the airport, however they welcomed BA's readiness to initiate discussions among the involved stakeholders for resolving these issues, through the establishment of the Environmental Advisory Committee.
- Existing noise from aircraft operations and especially potential future increased noise, was expressed as a concern particularly by representatives of Ledine settlement. Households living on the path of aircrafts have mostly grown accustomed to the noise, however, it would be important to work on reducing noise levels, especially if there will be more aircrafts landing and taking off from the airport in the future. Local residents would be ready to cooperate with the airport to determine noise levels and to identify ways in which noise can be reduced. Many of the local residents have taken measures to manage this impact by installing appropriate noise insulation windows and doors on their homes, however, this is not a solution for warmer periods of the year when they spend time outdoors, in their gardens. In addition, there are houses where such insulation has not been installed, due to the poor quality of housing and/or the inability of residents to finance such measures. Residents of Ledine are aware that the issue of noise from aircraft operations is not under the sole responsibility of the airport and recognize that addressing this issue requires involvement of many other actors. Representatives of New Surcin and Radiofar stated that noise is not a major concern for residents of their settlements, as all people constructed houses aware of the proximity of the airport. All three settlement representatives stated that they believe that addressing these issues through the work of the mentioned Environmental Advisory Committee would also be beneficial.
All three communities were positive about BA’s plans to support local community initiatives and believed that any such programme would significantly contribute to creating good ‘neighbourly’ relations with local residents. They expressed their willingness to cooperate directly with BA on defining local community priorities and hoped that such priorities could also include small infrastructure and communal improvements.

All three settlement representatives and New Belgrade municipality representatives invited BA to share any relevant information with them that can be published on their websites, Facebook pages or in other ways, to keep local residents informed about topics of interest. Contact details of BA’s social team were provided to all of them and the grievance mechanism established and implemented by BA was presented.

5.4. Key Future Engagement Activities

Planned engagement activities which will be undertaken by BA by the end of 2020, include:

- Meetings with businesses operating at the BA terminal building, in the process of assessing impacts and, if needed, for the development of the Livelihood Restoration Plan.
- Meetings with affected municipalities and local communities, for the development of the Social Investment Plan.
- Cooperation with relevant stakeholders on developing the Balanced Approach to Noise Action Plan and forming an Environmental Advisory Committee, with the aim of improving the airport’s management of environmental issues and reducing environmental impacts, including noise impacts. In connection to planned noise monitoring activities, BA and the implementing consultants will meet with municipal representatives and local community representatives and residents, to agree monitoring locations and any other needed actions.

The activities beyond 2020 have not been defined in great detail, as they will largely depend on the evolvement of previously mentioned activities and other external factors. However, it is already known that important stakeholder engagement activities are expected to occur in 2025, for the development of a Land Acquisition Plan. This will include meetings with affected land owners and users, the implementation of a socio-economic survey and engagement with other relevant stakeholders, such as government authorities. The above presented activities are described in more detail in the Project SEP.