

Luxembourg, 03/10/2025

# **Environmental and Social Completion Sheet (ESCS)**

#### **Overview**

Project Name: WARSAW TRAM II

Project Number: 2015-0081 Country: Poland

Project Description: Construction of new tramway lines in the city of Warsaw and purchase

of tramway rolling stock

### **Summary of Environmental and Social Assessment at Completion**

EIB notes the following Environmental and Social performance and key outcomes at Project Completion.

The project was appraised in 2016, and an Environmental and Social Data Sheet was prepared.

The Project concerned a framework loan to finance parts of the 2014-2020 strategic investment plan of Tramwaje Warszawskie Sp.z o.o. (Warsaw Trams), the City Company. The Project consisted of several schemes that are extending, modernising and improving the quality of the Warsaw tramway network and services, including some lines extensions and rehabilitation. Furthermore, the project included the acquisition of 123 new trams, replacing old ones and expanding the existing fleet to serve the new extensions and increase the level of service. The Project was also expected to include a new depot, to serve the new rolling stock. The schemes are part of the Cities Sustainable Transport strategy, which has been subject to a SEA.

At outturn, only 6 out of 16 schemes were allocated.

The table below shows the finally allocated schemes with the environmental process.

| Scheme | Description   | EIA    | Screening / env | Natura 2000      |
|--------|---|--------|-----------------|------------------|
| no     |   | needed | decision date   | declaration date |
| 1      | Construction of the tram line at Tarchomin, section Nowodwory – Lesna   | yes    | 24/05/2013      | 06/08/2010       |
| 3      | Polanka street  Construction of the tram line at Tarchomin, section Lesna Polanka – Winnica                   | yes    | 24/05/2013      | 06/08/2010       |
| 5      | Modernisation of the tram line in Obozowa street  | no     | 27/09/2013      | 23/05/2013       |
| 7      | Modernisation of the tram line in<br>Jagiellonska street, section Zeran –<br>Starzynskiego street             | no     | 08/09/2016      | 03/04/2017       |
| 9      | Modernisation of the tram line in<br>Grochowska street, section Zieleniecka<br>street – Wiatraczna roundabout | no     | 22/11/2016      | 03/04/2017       |
| 16     | Purchase of 123 tram units  | no     | n/a             | n/a              |

The construction and modernisation of tram infrastructure including the depot extension fall under Annex II of the EIA Directive 2011/92/EU and hence require a screening decision from the Competent Authority.

Schemes 1 and 3 have been screened in and EIA was prepared, and the environmental permit has been issued by Competent Authority. These schemes were completed in 2022. The



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mitigation measures required by the Competent Authority in Environmental Decision have been met.

Construction of new tram routes does not lead to significant inefficiency in the use of materials or in the direct or indirect use of natural resources. It is envisaged to prevent waste generation and manage waste in accordance with the waste hierarchy, and to act in accordance with the requirements that have been included in the decisions on environmental conditions. At the stage of implementation of the project, construction work was carried out in a manner that ensures the prevention of environmental pollution, in accordance with the provisions that were included in the decision on environmental conditions. In particular, these requirements concerned:

- turning off machinery and equipment during work breaks, which will reduce air pollution and minimize the risk of above-normal noise,
- using machinery and equipment in good working order, which protects against leaks and therefore reduces the risk of contamination of the soil and water environment,
- where necessary, spraying water on piles with material from demolition work or construction materials, keeping the site clean, performing wet cutting, transporting loose materials with vehicles equipped with tarpaulins, which reduces dust,
- providing a station with a sorbent for the immediate elimination of any spills and leaks
  of petroleum substances, which reduces the risk of contamination entering waterways,
- conducting proper waste management, ensuring, among other things, selective collection of waste and transferring it to a specialized entity with the appropriate permits.

Schemes 5,7 and 9 have been screened out by Competent Authority.

The manufacturing of tram vehicles falls outside the scope of the Environmental Impact Assessment (EIA) Directive 2014/52/EU (amending Directive 2011/92/EC).

Due to the partial expansion of the fleet, a new depot has been constructed. This depot was not allocated in the projects, nevertheless, it was treated as associated facility for purchased trams and assessment has been done. This depot has been subject to an EIA, which was approved by the Competent Authority in 2017. The depot was completed in 2024. The mitigation measures required by the Competent Authority in Environmental Decision have been met.

The project promotes low-emission transportation, giving travellers environmentally friendly rail transportation as an alternative to individual car travel. This is because the expansion of tram infrastructure increases the attractiveness of low-emission tram transport, which can be an incentive to give up driving a private car and choose public transportation. This will have the positive effect of reducing emissions of pollutants into the air (including particulate matter (PM), nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOCs), which come from the combustion of fuels in car engines. Thus, the project directly contributes to the reduction of greenhouse gas emissions and thus to climate change mitigation. Fewer cars on the road also means a reduction in traffic noise, which is particularly important in a large city like Warsaw. As part of the reconstruction and construction of the tram tracks, a green track beds was constructed, which has a positive effect on adaptation to climate change in the city by reducing the urban heat island effect (in general, plant/plant-covered surfaces heat up less than built-up surfaces, such as those covered with concrete or asphalt) and increasing the rainwater retention area.

The newly built and rebuilt track and network infrastructure will be adapted to violent weather events. The most sensitive element of tram infrastructure, exposed to violent weather phenomena, is the overhead catenary. In order to protect it from damage resulting from temperature fluctuations, and the consequent contraction or expansion of the wires, the



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reconstructed and newly constructed overhead catenary network is a compensated network. Network compensation means adjusting stresses and ensuring proper tension of contact wires and catenary wires in the situation of changes in ambient temperature. The overhead catenary is also susceptible to rupture in the event of heavy rains or strong winds. In order to minimize the consequences of such an event, the Company has internal specialized units (track ambulance and power ambulance). These services are on standby 24 hours a day and are equipped with specialized equipment, so that all emergencies are removed professionally and immediately. In addition, in order to reduce the risk of lightning strikes, the overhead line is equipped with surge arresters and lightning arresters.

As far as track infrastructure is concerned, trackways are most vulnerable to flooding resulting from sudden and intense rainfall. Effective drainage systems are used to protect them from flooding. In addition, trackways can be impassable, due to heavy snowfall. In order to maintain the route's passable, plow cars and so-called "threshers," which are technical cars that remove frost/ice from the contact wires, are used. In addition, switch heating is installed to protect switches from low temperatures.

#### Summary opinion of Environmental and Social aspects at completion:

EIB is of the opinion based on reports from the Promoter and site visits by the EIB team during construction, that the Project has been implemented in line with EIB Environmental and Social Standards, applicable at the time of appraisal.