

Application for preliminary environmental impact assessment

In accordance with Cabinet of Ministers Regulation No. 18 of January 13, 2015 "Procedure for assessing the impact of the intended activity on the environment and accepting the intended activity"

February 20, 2026

Riga

1. Name, surname, personal identification number of the proposer (for a legal entity – name and registration number, legal address, for a public entity or its institution – name, address, for a natural person – declared address of residence or address of residence where person can be reached), telephone number and e-mail address:

AS "Augstsprieguma tīkls"

Reg. No. 40003575567

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2. Contact address of the proposer (address and telephone number), for a legal entity also details:

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VAT registration number LV40003575567

3. Name of the intended activity (object):

The fourth Estonian-Latvian electricity interconnection (4th EE-LV interconnection)

4. Information on the description of the physical characteristics of the intended activity, including information on the scope, preparation of the activity before the commencement of the intended activity, demolition works and their solutions (if the intended activity includes such), types of technologies to be used, necessary infrastructure facilities (e.g. access road, parking lot, fences, wastewater treatment plants, water supply, artesian wells, auxiliary buildings, landscaping):

The Estonia-Latvia Fourth Electricity Interconnection is a strategically important transmission infrastructure development project between Latvia and Estonia (see Fig. 1), which will ensure the security and stability of the electricity supply for both countries and for the entire Baltic Sea region, which is one of the most important aspects of the Baltic States electricity networks operating synchronously with the networks of continental Europe. In addition, the project will increase the security of electricity supply and resilience of the power system, which is a very important issue in the current geopolitical situation in the energy sector. The planned activity includes the construction of an AC high-voltage submarine electricity transmission cable from Saaremaa (Estonia) to Kurzeme region in Latvia.

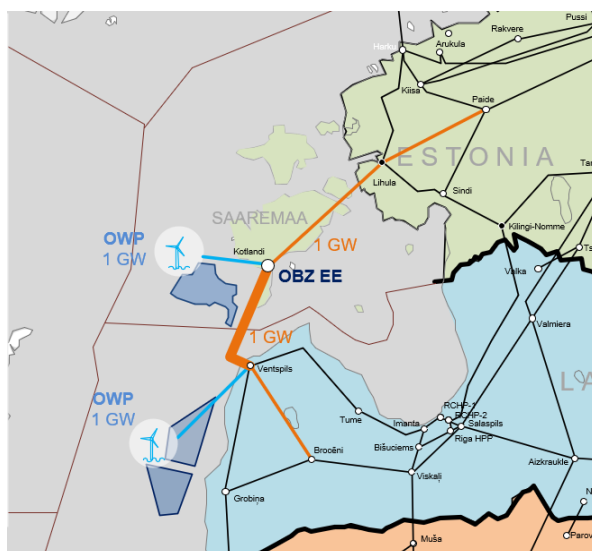


Fig. 1. Estonia-Latvia interconnection

The connection point of the cable line in the territory of Latvia is planned to be in a newly constructed substation in the city of Ventspils (cadastral No. 27000300114, address Ostas mežs 1), or as an alternative option, a variant is being studied in the Užava parish of Ventspils region near the village of Ziras. In both cases, the cable line in the territory of Latvia is planned to be built on land for a length of a few kilometers in order to reach the planned interconnection connection point to the Latvian electricity transmission network, i.e. the planned transformer substation (see Fig. 1).

Currently, AS "Augstsprieguma tīkls", as the transmission system operator (hereinafter - TSO), which is responsible for the system security and the development of the transmission network, together with the Estonian TSO Elering, is conducting technological studies to select the optimal interconnection cable solution from a technical point of view. The intended voltage of the interconnection is planned to be 220 kV, 275 kV or 330 kV with a transmission capacity of 700 MW and up to 1000 MW. These technical parameters and the optimal connection point to the Latvian electricity transmission network will be determined in the feasibility study, which has been launched in October 2025 and is planned to be completed in 2026.

The next step in the interconnection development process is the conduct of a preliminary environmental impact assessment (hereinafter - EIA).

The width of the selected offshore route, which will be used further during the construction of the interconnection, depend on the selected technology.

The cable line will terminate at the new transformer substation in the city of Ventspils or near the village of Ziras in Zirū parish.

5. Information on the possible locations of the intended activity (indicate addresses and, if possible, cadastral designations of land units) and their characteristics, taking into account the environmental condition and sensitivity of the location and its potentially affected territory:

In the Latvian territory of the EE-LV 4th interconnection, a potential transformer substation near the city of Ventspils is provided for in cadastre No. 27000300114, address Ostas mežs 1. The land plot is the property of the municipality and has been transferred into possession of the Ventspils Freeport Authority. The status of the land is forest land, the functional zoning specified in the Ventspils city spatial plan is an industrial territory. The required substation territory is up to 15 ha. The distance to the sea does not exceed 2 km.

In the alternative variant, a transformer substation near the village of Ziras is provided for in cadastres No. 98900010474 (4.87 ha) and 98900010346 (8.18 ha), which are the property of the municipalities. In the Ventspils region spatial plan, they are marked as agricultural territory. The distance to the sea does not exceed 10 km. However, the land corridor of the cable line may be longer due to the nature park "Užavas lejtece", the nature reserve "Užava" and other protected areas.

6. If the intended activity is a change in an existing activity, – a description of the existing activity, including information on its volumes, technological solutions, main raw materials and their storage, use of natural resources, emissions, wastewater and waste generation:

Currently, neither AS Augstsprieguma tīkls, as a developer of the power transmission infrastructure, nor other energy sector companies have experience in developing energy infrastructure at sea, therefore the planned activity (construction of a submarine power transmission cable) will be implemented for the first time in the history of Latvia. Currently, detailed information on all construction volumes and solutions is not available and will be available in the next stages of project development, after the completion of conducted studies and necessary consultations.

7. Distance to the nearest settlement:

The planned connection point of the cable line at the new Ventspils substation near Ventspils city will be located next to Staldzene (which is part of the administrative territory of the city of Ventspils).

In the alternative, the connection point of the cable line is planned in Užava parish next to the village of Vendzava.

In both cases, the exact distances will be determined in the preliminary design study of the interconnection.

8. Information about the intended activity, including the character of the activity:

Seasonal activity(periodicity) _____

The planned 4th EE-LV interconnection, planned as a cable line, will be operated continuously after construction, i.e. 24/7. Short-term interruptions in operation will only occur during planned or emergency repairs.

9. Technical description of the equipment (parameters (e.g., area...), capacity, manufacturer, year of manufacturing...)*:

The cable interconnection capacity is planned to be between 700 MW and 1000 MW, which will be determined in the further stages of the project development. Currently, in all studies and development planning documents, the interconnection capacity is assumed to be 1000 MW in order to assess the maximum possible corridor from the environmental impact point of view. If in the future, after the appropriate assessment, a decision shall be made on an interconnection of a lower capacity, then the actual environmental impact will be lower. The maximum planned length of the cable line to the Latvian maritime border is up to 100 km, depending on the landing site of the submarine cable in the territory of Latvia (currently two possible options are being studied in the city of Ventspils or in the Užava parish) and possible needs to avoid specially protected nature areas. Currently, AS "Augstsprieguma tīkls" is conducting a technological study to determine the most suitable technology for the interconnection, where 2 possible scenarios are identified, for which an environmental impact assessment is also planned in the future (see Figure 2). In Figure 2, the red line marks the currently determined most optimal route option in Latvia from an environmental point of view, which could change during the EIA process.



Fig. 2. Possible route options for the Estonia-Latvia interconnection.

The technical parameters of the interconnection are currently being studied in detail to find the most optimal solution from a technical and environmental point of view. These parameters will be determined in the subsequent stages of project development.

10. Brief description of the technology (attach the full description and technological schemes in the appendix)*:

The planned interconnection technology is designed for 220kV or 275kV aluminum/copper cables. The number of cables depends on the approved capacity of the interconnection, for which the Latvian and Estonian TSOs are currently conducting the necessary studies. Technologies and methods will be specified in the subsequent study stages. It is planned that the cable line section on land will be constructed using the piercing method or in trenches, while on the sea coast, where there are steep banks in ecologically sensitive areas, it is planned that directional drilling will be used. The length of a separate cable laying

section exceeds 100 meters. The cable line in the sea is planned to be laid by flushing it into the ground. If the ground is too hard or rocky, the cable line is planned to be covered with a stone cover in these sections. Detailed technology will be described in the preliminary design study in the subsequent project study stages.

* To be filled in if a new production is planned to be started

11. Chemical substances, chemical products and other materials used in the production process as raw materials or auxiliary materials and which are not classified as hazardous:

Nr. Or Code	Chemical substance or chemical product (or groups thereof)	Type of chemical substance or chemical product ⁽¹⁾	Usage	Stored capacities (tons), type of storage ⁽²⁾	Yearly usage (tons)

Notes.

(1) Types of raw materials or auxiliary materials: metal, wood, plastic, clay, sand, petroleum products, organic substances, inorganic substances, fruits, vegetables, animals, paints with less than 5% volatile organic compounds (hereinafter referred to as VOCs), detergents, filter materials.

(2) Storage: in drums, tanks, underground, outdoors, indoors and other locations. Maximum and average quantities stored.

12. Hazardous chemical substances and chemical products used in production as raw materials, auxiliary materials or formed in intermediate or final products:

Nr. Or Code	Chemical substance or chemical product (or groups thereof)	Type of chemical substance or chemical product ⁽²⁾	Type of usage	CAS number ⁽³⁾	Hazard class ⁽⁴⁾	Hazard designation letter	Risk exposure characteristics (R-phrase ⁴)	Safety requirement designation (S-phrase) ⁽⁴⁾	Max. storage quantity (tons), storage type ⁽⁵⁾	Amount to be used (tons/year)

Notes.

(1) Chemicals are considered hazardous if they are classified in one of the hazard classes listed in this Regulation in accordance with Regulation No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No. 1907/2006.

(2) Type of raw materials: petroleum products, tar products, inorganic compounds, organic compounds, paints with a VOC content of more than 5% and others.

(3) CAS number – substance index in the Chemical Abstracts journal.

(4) Characterization of the effect of the substance (R-phrase) – the risk phrase characterizes the effect of the hazardous chemical substance; safety requirements designation (S-phrase) – safety phrase describes the necessary safety measures in accordance with the Cabinet of Ministers Regulation No. 107 of 12 March 2002 "Procedures for the Classification, Labelling and Packaging of Chemical Substances and Chemical Products".

(5) Storage in barrels, tanks (specify the type of tank), underground, outdoors, indoors and elsewhere.

Attach safety data sheets (SDS) in the appendix!

13. Production and its quantity (per year):

The planned cable line is a transmission infrastructure intended for the transmission of electricity. The volume of electricity to be transmitted will depend on price fluctuations in the Baltic and Scandinavian electricity markets (Nord Pool), the implementation and operation of ELWIND and other large-capacity electricity generating and consuming projects in the year of project implementation, the loading of the new line in accordance with the requirements and characteristics of the power system operating modes, operational reliability requirements and other factors. It is expected that the Estonia-Latvia electricity transmission interconnection will transmit from 3 to 6 TWh of electricity per year.

14. Extraction and use of natural resources (specify type and volume per day, season, year)

Type	Volume, m ³		
	Per day	Per season	Per year
<i>Estimated water consumption</i>			

The extraction and use of natural resources is not intended.

15. Water supply solution:

The use of water resources will not be required for the operation of the cable line. A minimum amount will be required during construction, which will be provided by the builders selected for construction.

The water supply required for the sanitary unit in the substation control building will be provided in accordance with the requirements of regulatory enactments. This will be addressed in the preliminary design.

Source/type of water extraction:

- ☐ Existing (attach documentation on the well/abstraction site, marked on the boundary plan, well passport, calculation of protective zones,)
- ☐ Planned

16. Planned amount of wastewater (domestic, industrial, rain) (m³ per day, month or year):

Is there/is there no wastewater treatment plant, (if not, where will it be transferred)

Sewage tanks will be constructed at the substation, with the tank placed as close as possible to the entrance to the substation territory.

Planned type of wastewater treatment or storage _____

Pollutants in wastewater before treatment _____

Pollutants in wastewater after treatment _____

Discharge point of treated wastewater _____

17. Heating solution:

The substation control building will be heated by electric heaters from low-voltage self-consumption distribution busbars.

The required power and consumption will be determined when developing a preliminary design.

Combustion (heating) plant, its capacity (MGW or kW):

Existing _____

Planned _____

Expected type and quantity of fuel, its storage _____

18. Emissions of pollutants into the air (for technological equipment – substances, quantities):

Not intended

19. Odors (in production facilities, intensive agriculture facilities):

Not intended

20. Emission of pollutants into soil (to be filled in at production facilities, in accordance with Cabinet of Ministers Regulation No. 804 of 25 October 2005 "Regulations on Soil and Ground Quality Standards"):

It is not planned to exceed soil and ground quality standards.

21. Waste. Expected waste management:

Waste generated during the construction of cable lines and substation technologies will be disposed of by the construction companies selected for the construction, in accordance with the requirements of regulatory enactments.

During operation, domestic waste may be generated from the substation control building, which will be transferred to the local waste management company.

If any industrial waste is generated due to the need to repair cable lines or any equipment, it, including hazardous waste, will be disposed of in accordance with the requirements of regulatory enactments.

By-products, including manure _____
Used packaging (type, quantity, management) _____

Hazardous waste management (in accordance with the Waste Management Law and Cabinet of Ministers Regulation No. 302 of 19 April 2011 “Regulations on waste classification and properties that make waste hazardous”)

22. Physical influence (e.g. electromagnetic radiation, vibration, noise):

Possible physical impacts from the intended operation are electromagnetic field and noise.

Since November 1, 2018, the Cabinet of Ministers Regulations No. 637 of 2018 “Regulations on the Assessment and Limitation of the Exposure of the Population to Electromagnetic Fields” have been in force in Latvia. According to the aforementioned documents, the target values of the electromagnetic field for a frequency of 50 Hz correspond to an electric field intensity of 5000 V/m and a magnetic flux density of 100 μ T. Electric fields are completely isolated in the case of underground cable lines. Magnetic fields mainly depend on the current strength. Various studies conducted in the European Union show that the magnetic field indicators of high-voltage cable lines are lower.

During the construction of the cable line, increased noise may occur, caused by the movement and operation of heavy machinery. It is planned that the reconstruction work will be carried out on weekdays from 7:00 to 19:00, observing the established restrictions. During the construction of the electricity transmission line, equipment that meets the requirements of Cabinet Regulation No. 163 “Regulations on Noise Emission from Equipment Used Outdoors” will be used.

The underground cable line does not generate noise as a result of its operation and therefore it is expected that the noise emission will not exceed the threshold values set out in Cabinet of Ministers Regulation No. 16 “Noise Assessment and Management Procedures”, therefore there is no need to implement noise mitigation measures. Unlike an overhead line, an underground cable line will not have corona discharge noise.

Possible noise in transformer substations. Noise indicators will be modeled and assessed during the development of the preliminary design and EIA. Detailed noise mapping will be carried out. If necessary, special measures will be taken, such as the construction of noise-insulating walls, etc.

It is planned that the planned activity will not have an impact on the landscape. In the offshore section, the cable line will be built (embedded) into the bed. The crossing of the beach area will be organized using the technology of culvert-guided drilling, and on land, the cable line will be laid in trenches or constructed with horizontal culverts. In the subsequent stages of the project, it will be assessed whether it would be possible or permissible to build an overhead line instead of the cable line in individual stages.

In Ventspils, the Staldzene steep bank and in Užava parish, the Jūrkalne-Sārnate steep bank types are assessed as "Steep bank with sandy beach with pebbles". The Jūrkalne steep bank is included in the list of national landscape treasures of Latvia.

23. Surrounding water bodies (watercourses (indicate distance to them), impact on fish resources, impact and groundwater level, possibility of flooding (if necessary, attach a certificate from the Latvian Forestry and Marine Conservation Agency):

The cable line will be mainly built on the Baltic Sea bed, where no impact on fish resources is expected. The nearest water bodies on land are Lake Būšnieku or Lake Sārnate, but the line route will be more than a kilometer away from them.

There will be no impact on fish resources.

On land, the cable line route may cross drainage ditches or rivers, but after construction is completed, these objects will be cleaned up to their original state and there will be no impact on groundwater levels.

24. Expected impact on specially protected natural areas, specially protected species, specially protected habitats and micro-reserves:

The cable line routes will be planned to avoid specially protected nature areas as much as possible. The dune protection zone of the Baltic Sea and the Gulf of Riga coast, the habitat area "Wooded coastal dunes" (2180) and, possibly, "Temperate meadows" (6510) will be crossed. It is very likely that the "Steep Sea Banks" (1230) will be crossed.

The object is located in the territory of _____

If not located, indicate the distance (km) to:

Specially protected natural areas _____

Natura 2000 areas _____

The cable line will cross the Natura 2000 site "Irbe Strait" (see Fig. 3), which is a protected marine area. It was created for the protection of specially protected birds. The underwater cable line will not have any impact on it.



Fig. 3. Proposed sea crossing of the environmental protection areas of the proposed operation

If the cable line connection point is near Ventspils, the land part of the cable line will be located 1.5 km from the Natura 2000 territories "Būšnieku lake shore", 6.2 km "Platene Marsh" and 7 km "Klāņu Marsh".

If the cable line connection point is in Užava parish, the land part of the cable line will cross or be located near the Natura 2000 territories "Užava", "Sārnate Marsh" and "Užava river lower reaches". The possible impact and cable line route solutions will be determined in the preliminary design or EIA studies.

For Micro-Reserves _____

In Zirū parish, there is a micro-reserve "Putni" (ML code 2720) approximately 3.5 km from the prospective transformer substation. The cable line will not cross this micro-reserve.

For Specially protected species _____

For specially protected habitats _____

In the Irbe Strait, the submarine cables will be placed in such a way as to have no or minimal impact on the habitats "Stone banks in the sea" (EU classification code 1170).

In Ventspils, the cable line will cross the specially protected habitat "Wooded coastal dunes" (2180). The specially protected habitat "Steep Sea Banks" (1230) will be crossed. The cable line will be built next to the habitat "Swamped forests" (9080*).

If the cable line in Užava and Zirai parishes is built straight to the sea, it may cross the habitats "Embryonic dunes" (2110), "Steep Sea Banks" (1230), "Wooded coastal dunes" (2180), "Old or natural boreal forests" (9010*) and "Temperate grasslands" (6510). If the land section of the cable line in Užava and Zirai parishes is designed to minimally cross habitats (the length increases by approximately one and a half times), the line route may also be located next to the habitats "Species-rich pastures and grazed meadows" (6270*), "Vilkakūla grasslands (sparse grasslands)" (6230*), "Swamped forests" (9080*), "Active high bogs" (7110*) and "Dry grasslands on calcareous soils" (6210). The potential impact and cable line route solutions will be determined in the feasibility study.

For Historically, archaeologically and culturally significant locations _____

In the northwest of Ventspils, 20 km from the coast, there is a wreck of the cruiser "Bremen", which is included in the list of state-protected cultural monuments.

The closest cultural and architectural monuments of national importance in the city of Ventspils to the planned activity are 3.8 km away "Ventspils City Historical Center", which also includes the national cultural monument "Ventspils Old Town" and individual architectural objects, 3.7 km away "Ventspils Railway Station Main Building and Water Tower", 5.5 km away "Ventspils Pilot Tower".

The closest architectural, archaeological and industrial monuments of national importance to the planned activity in Ventspils region:

In Užava parish > 6 km away Užava Lutheran Church, > 3 km away Sārnate settlement, > 5 km away Užava lighthouse, > 5 km away Užava ancient cemetery, > 3 km away Silkāji ancient cemetery, > 4 km away Užava Spirit linden and Spirit Springs, > 0.5 km away Celmu settlement; Ziru parish > 5 km away Priednieki settlement, > 3 km away Ratnieki ancient cemetery, > 3 km away Sise ancient cemetery.

25. Compliance with territorial planning (land use purpose):

1) whether or not there is a territorial planning Yes ☐ No ☐

2) whether or not there is a detailed planning Yes ☐ No ☐

3) compliance with the planning (municipal certificate)

26. Area of land to be transformed and previous land use:

The current usage status of the land area required for the construction of the cable line near Ventspils is forest land, the planned use of the area is forest land and industrial area. The current use status of the land area required for the construction of the cable line in Užava and Ziru parishes is forest land and agricultural area.

27. A description of the environmental impact of the proposed activity, including a description of all potential significant impacts, to the extent that information is available on these impacts, resulting from:

27.1. the generation of emissions, waste and by-products:

The impacts of the proposed action are described in paragraphs 21 and 22.

27.2. use of natural resources (especially soil, land, water and biodiversity):

The planned activity will not significantly affect the use of land areas. In accordance with Article 16 of the "Protection Zones Law", a protection zone will be created at a distance of 1 to 1.5 meters from the cable line axis on each side, but if it crosses water bodies, the protection zone will be at a distance of 100 m on each side.

The termination of the cable line will be at a transformer substation. In the case of Ventspils, it will be located in the territory "Forrested Seaside dunes" (2180), in the case of Užava and Ziru parishes, no territory designation has been determined.

27.3. mutual and cumulative impact with other existing or accepted planned activities affecting the same area:

For the safe and secure operation of the 4th Estonian-Latvian electricity interconnection, the internal network reinforcement is necessary, which will be implemented by the construction of the 330 kV line "Ventspils-Brocēni-Varduva". Therefore, the planned operation is related to the 110/330 kV electricity transmission line "Ventspils-Brocēni-Varduva", which is currently undergoing an environmental impact assessment. Both power lines will be connected in a common substation.

A large-capacity wind farm is planned to be built to the northwest of Ziras, however, this will not directly affect the construction of the cable line from Ziras to the sea-shore.

28. Description of planned measures intended to prevent or eliminate conditions that could cause significant adverse effects on the environment:

No risks or conditions have been identified that could cause significant adverse environmental impacts.

29. If the activity is intended to be carried out in the internal waters, territorial sea or exclusive economic zone of the Republic of Latvia:

29.1. ellipsoidal (geographic) coordinates in the 1984 World Geodetic System (WGS 84) (for activities in the territorial sea, exclusive economic zone of the Republic of Latvia):

29.2. plane coordinates in the Latvian coordinate system LKS-92 TM (for activities in the internal waters of the Republic of Latvia):

Approximate location of cable line landing near Ventspils: 57.433, 21.595 (WGS 84); 368141, 355620 (LKS-92 TM)

Approximate location of cable line landing in Užava parish: 57.15, 21.41 (WGS 84); 337059, 343318 (LKS-92 TM)

30. The following documents are attached to the application:

30.1. A copy of the land boundary plan showing the location of the activity;

30.2. A map of the territory (scale at least 1:10000);

30.3. Copies of documents certifying land ownership; (land register, lease agreement, etc.);

30.4. A description of the full technological process (cycle) of production and technological schemes;

30.5. Safety data sheets for chemical substances and chemical products;

30.6. Expert conclusions;

The information attached to the application is on ____ pages.

The information provided in the application, the documents attached to the application and other information are true and comply with the requirements set out in the regulatory enactments:

Signature*: _____

Signature transcript*

Note. * The fields "signature" and "deciphering of signature" are not filled in if the document is prepared in accordance with the regulatory enactments on the preparation of electronic documents.

The personal data contained in this application and the attachments to the application are necessary and will be used to ensure the provision of the service requested in the application in accordance with the provisions of regulatory enactments. Information on the rights of the data subject and other information on the processing of personal data can be found in the privacy policy of the State Environmental Service, which is available on the Internet at www.lwd.gov.lv.

For the notified activities, which require an initial assessment of the impact of the intended activity, which is determined by the requirements of the Law "On Environmental Impact Assessment" and the "Protection Zones Law" from 1 January 2008 in accordance with the Cabinet of Ministers Regulation No. 689 of 9 October 2007 "Regulations on the State Fee for the Initial Assessment of the Impact of the Intended Activity on the Environment", the state fee rate for the initial assessment is 213.43 euros, which is paid by the initiator before the preparation of the relevant initial assessment, using non-cash payment (by transfer).

The state fee is transferred to the State Treasury.

Account LV76TREL1060210929100

Indicating in the payment order – **state fee for preparing the initial assessment at the State Environmental Service, indicating the address of the specific facility.**