Initial positions for pre-selection of a location for the municipal designated special plan of wind farms of Valga rural municipality, and impact assessment, including the strategic environmental assessment programme

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Title:	**Initial positions for pre-selection of a location for the municipal designated special plan of wind farms of Valga rural municipality, and impact assessment, including the strategic environmental assessment programme**
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Abbreviations used in the document:

EELIS – EELIS (Estonian Nature Information System), Estonian Environment Agency

DSP – designated spatial plan

ETD – Estonian Topographic Database

KeHJS – Environmental Impact Assessment and Environmental Management System Act

EIA – environmental impact assessment

LG – local government

SEA – strategic environmental assessment

PlanS – Planning Act

TU – potentially suitable wind farm area

Introduction

The preparation of Valga rural municipality's municipal designated spatial plan (hereinafter DSP*)* and the strategic environmental assessment (hereinafter SEA) was initiated under the Valga Rural Municipality Council's resolution No 81 'Initiation of municipal designated spatial plan and strategic environmental assessment' of 25 October 2023. The reason for initiating the designated spatial plan was the applications submitted by Sunly Wind OÜ (registry code 14937897) and Eurowind Energy OÜ (registry code 16584180) to initiate a municipal designated spatial plan in the Valga rural municipality in order to find the most suitable location for the construction of wind farms and the infrastructure necessary for their operation. Sunly Wind OÜ submitted the corresponding application on 31 August 2023 for an area of 7,400 ha and Eurowind Energy OÜ submitted a corresponding application on 9 October 2023 for an area of 2,800 ha. The purpose of preparing the DSP is to select the most suitable locations for the construction of wind farms and the infrastructure necessary for their operation in the planning area, and then to establish the building right in the selected locations and to solve other relevant tasks specified in subsection 1 of § 126 of the Planning Act.

On the basis of Valga Rural Municipality Council resolution No 96 of 31 January 2024, Rural Municipality Council resolution No 81 of 25 October 2023 was amended. Pursuant to resolution No 96, Eurowind Energy OÜ submitted an application to the Valga Rural Municipality Government on 29 November 2023, withdrawing the application to initiate the municipal designated spatial plan and the SEA for the planning of wind farms, and making a proposal to cancel the preliminary agreement (No 8-1.10/136) concluded with Valga Rural Municipality Government on 24 October 2023 on the ordering of a municipal designated spatial plan and bearing the costs of carrying out an impact assessment, including a strategic environmental assessment. Valga Rural Municipality Government considered the contract between the parties to be terminated based on the agreement between the parties. Under Valga Rural Municipality Council resolution No 96, the entire planning area was reduced by 2,800 ha. The preparation of the municipal designated spatial plan and SEA will continue in the planning area, which is approximately 7,400 ha and for which Sunly Wind OÜ is interested in preparing the plan.

A designated spatial plan is prepared for the planning of a wind farm,[1] which is an object with significant spatial impact, and the infrastructure necessary for its operation.

This document includes the initial positions (hereinafter IP*)* for the stage of pre-selecting a location for the designated spatial plan and the plan's SEA programme. It is a source document that serves as the basis for preparing a resolution of pre-selecting the location of the designated spatial plan and the SEA report on the pre-selection of the location.

'Initial positions' means a document in which the authority arranging creation of the spatial plan describes the need for and the purpose of creation of the plan and the tasks the plan aims to fulfil, proposes a preliminary time table for creation of the plan and provides an overview of the surveys required for, and of the persons to be invited to participate in, creation of the plan.

The SEA programme:

1) determines the scope of the strategic environmental assessment based on the nature and content of the strategic planning document;
2) includes a description of the environment expected to be impacted;
3) includes links of the strategic planning document with other strategic planning documents;

[1] Under Government of the Republic Regulation No 184 'Grid Code' of 26 June 2003, 'wind farm' means a power plant consisting of several wind turbines and the devices connecting wind turbines to each other and to the connection point, and the buildings and structures. A wind farm with a significant spatial impact is a wind farm consisting of wind turbines with a peak height of more than 30 m.

4) explains the expected significant environmental impacts of the implementation of the strategic planning document, including impact on human health, the possibility of transboundary environmental impacts and the potential impact on a Natura 2000 site;
5) describes the assessment methodology to be used in the strategic environmental assessment;
6) designates the persons and authorities who are expected to be impacted by the proposed activity under the strategic planning document or have a legitimate interest in the strategic planning document;
7) includes a time table for the publication of the strategic environmental assessment and its results, arising from the timetable for the preparation of the strategic planning document;
8) includes details of the person who prepared the strategic planning document, the name of the leading expert who prepared the programme and the composition of the expert group, indicating which fields and impacts will be assessed by each person in the expert group;
9) describes the views expressed by the authorities and persons concerned.

The impacts are assessed in the SEA report.

The document has been prepared in cooperation with the officials of the Valga Rural Municipality Government and consultants AB Artes Terrae OÜ and LEMMA OÜ, found through a public procurement process, for the pre-selection of the designated spatial plan's location and the preparation of its SEA. Everyone has the right to submit proposals for the improvement of this document during the period of its public display.

1 Initial positions for pre-selecting a location for the designated spatial plan

1.1 Purpose, need and tasks

The need for Valga rural municipality to prepare a designated spatial plan arises from the fact that the preparation of a designated spatial plan has been initiated under Valga Rural Municipality Council resolution No 81 of 25 October 2023 and the developer (Sunly Wind OÜ) has an interest in building a wind farm on the territory of the rural municipality. The need to build wind farms, in turn, arises from the climate and energy policy of Estonia. Estonia's goal is that by 2030, all electricity consumed must be produced from renewable sources. Estonia's long-term objective is to balance removals and emissions of greenhouse gases by 2050 at the latest, ie to reduce greenhouse gas net emissions to zero by that time.

The purpose of preparing the DSP is to select the most suitable locations for the construction of the wind farm and the infrastructure necessary for its operation in the planning area, and then to establish the building right in the selected locations and to solve other relevant tasks specified in subsection 1 of § 126 of the Planning Act. The DSP is prepared with a level of precision that allows for the further planning of wind farms under design specifications after it is brought into effect.

The area of the designated spatial plan covers the areas of the following villages in the northern part of Valga rural municipality (Figure 1): Mustumetsa village, Killinge village, Kiviküla, Uniküla, Õruste village, Tõlliste village and Sooru village. The area of the designated spatial plan is approximately 7400 ha.

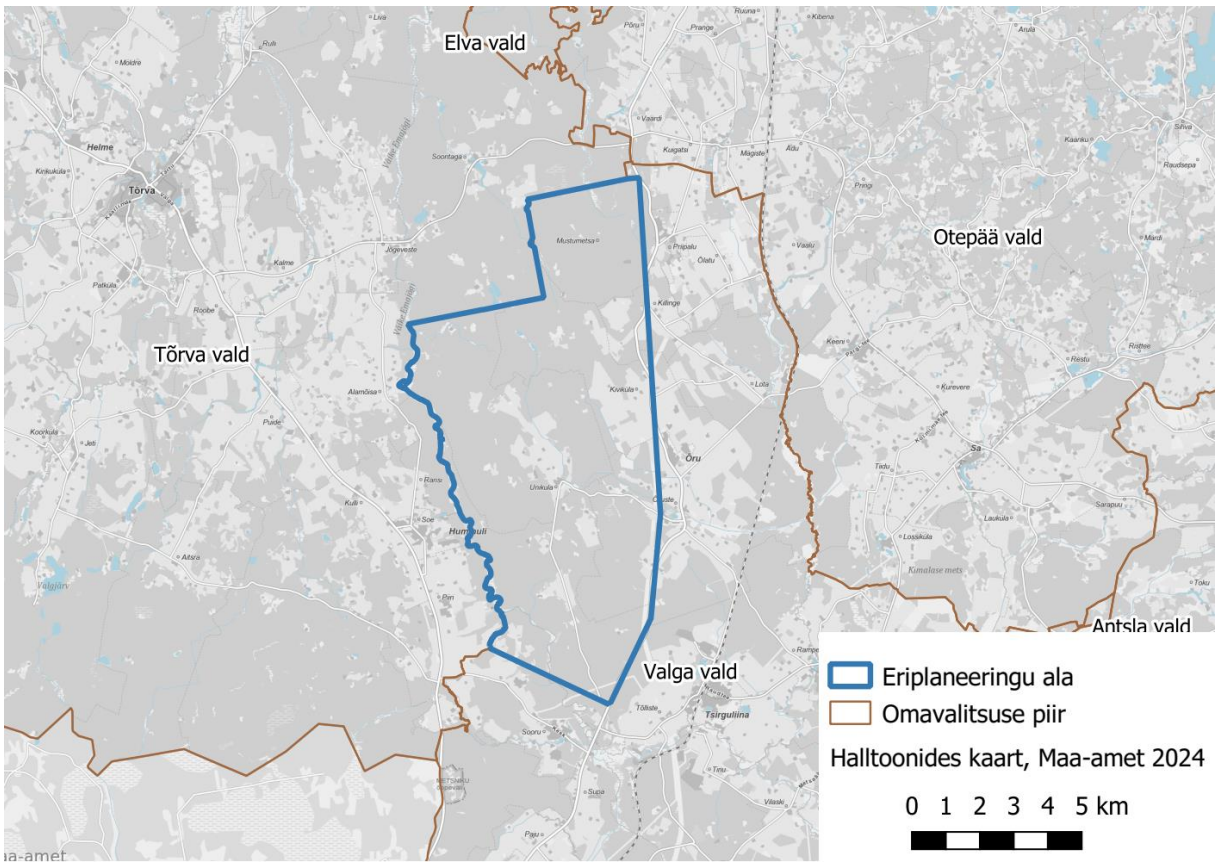

Figure 1. The location of the designated spatial plan.

The purpose of the designated spatial plan is to search for a suitable location for the wind farm. The planned wind farm may also consist of several separate groups of wind turbines in the same pre-

selection area with one connection point, a common electricity and communications network and, if necessary, an access road network.

The maximum authorised height and number of wind turbines in the wind farm's area are determined during the pre-selection of the location, based on the size of the suitable location and the effective location of the wind turbines. The maximum authorised height limit for wind turbines will be determined in cooperation with the Estonian Ministry of Defence. In the DSP, the wind turbines are assigned fundamental positions in the land area of the wind farm.

When choosing the location of wind turbines, restrictions and limitations arising from legislation, recommendations made by authorities (incl instructions for planning renewable energy production), local interests and values and reasoned statements of the persons invited to participate are taken into account.

Within the DSP, connection is solved by a 110 kV or 330 kV transmission network. For the wind farm's connection to the electrical grid, existing substations or direct connection to the 110 kV/330 kV power line are preferred. The connection is planned with an underground cable line. The indicative location and approximate length of the cable lines between the wind farm and the grid connection point are determined during the pre-selection process of the location.

When selecting the location for the wind farm, it is necessary to consider both public interests and the state's duties and obligations in reducing greenhouse gas emissions and mitigating the effects of climate change, as well as the development of wind energy production technology.

1.2 Arranging the creation of the designated spatial plan

Pursuant to subsection 1 of § 95 (1) of the Planning Act, a municipal designated spatial plan is created in order to erect a construction work that has a significant spatial impact and whose location has not been determined in the comprehensive spatial plan. Pursuant to clause 4 of the Government of the Republic Regulation No 102 'List of construction works that have a significant spatial impact' of 1 October 2015, a wind farm consisting of wind turbines with a height of more than 30 meters is considered to be a construction work with a significant spatial impact.

The preparation of a municipal designated spatial plan (DSP) is a multi-stage process. The first stage involves the preparation of the **initial positions of the designated spatial plan (IP)** and the **SEA programme.** IP is the basis for the preparation of a draft resolution of pre-selecting the location of the designated spatial plan, and the program serves as the basis for further carrying out the SEA and preparing the **report concerning the location pre-selection stage of SEA**.

The second stage of preparing the municipal designated spatial plan is the preparation of the **report of the first stage of the strategic environmental assessment** on the basis of the programme and **the preparation of the pre-selection of the location** of the designated spatial plan. **A resolution of pre-selecting the location is based on the SEA and pre-selection of the location.** The resolution is made by the local government council.

From there, it is possible that following the selection of the location, either the **preparation of a detailed solution and its SEA report or the issuance of design specifications (if necessary, along with conducting an environmental impact assessment) will follow.**

The detailed solution determines the construction rights for the wind farm and related civil engineering works (including the number of turbines and their placement within the area) and addresses other tasks arising from the Planning Act. The SEA report for the detailed solution examines the impacts of the proposed activity at the level of detail specified in the detailed solution. The SEA report for the location selection stage serves as the basis for preparing the SEA report for the detailed solution of the designated spatial plan.

The municipality may, in the process of drafting a municipal designated spatial plan for a wind farm, waive the requirement to develop a detailed solution and instead bring the plan into effect based on the resolution of pre-selecting the location, provided no factors are applicable that would exclude further specification of the wind farm by design specifications and provided the resolution of pre-selecting the location states the conditions based on which such specifications may be issued. **When preparing the pre-selection of the location for wind farms in Valga rural municipality, the objective is to prepare the plan, if possible, with such accuracy that there would be no need for additional planning of the[2] detailed part.** At the stage of preliminary location selection, approximate locations of the wind turbines and the infrastructure serving them (roads and lines) are presented The resolution of pre-selecting the location sets out the conditions under which the design specifications are issued. The solution is possible if it becomes clear during the pre-selection of the location that the designated spatial plan includes areas where there are no exclusionary factors for the further development of the wind farm, including there is a conviction that there will be no adverse impact on Natura sites (for information on Natura see also chapter 2.5.1).

Concurrently with the DSP, the comprehensive spatial plan for Valga rural municipality is being prepared. The author of the DSP must take into account the information added during the process of preparing the aforementioned comprehensive spatial plan and the circumstances that arise during its proceedings.

1.3 Formalisation of a designated spatial plan

A designated spatial plan must be prepared in a form and scope that allows for the local government to adopt a resolution on the approval of or refusal to approve the pre-selection of the location for the designated spatial plan. The work must correspond to this level of precision, including the conditions under which design specifications are issued, so that the local government can, if it wishes, bring the spatial plan on the bases provided for in § 95[1] of the Planning Act into effect. Planning documents must explain and describe the existing situation and compare the changes of the situation and the impact of the changes from the perspective of economic, natural environment and social aspects.

When preparing a designated spatial plan, the relevant implementing provisions must be taken into account when the amendments to the Planning Act and related legislation enter into force.

Formal requirements:

- The DSP and SEA must be prepared in accordance with good planning practices and considering the final objective of the project. The work also involves conducting necessary surveys if the existing surveys do not provide sufficient relevant information.
- The DSP must consist of an explanatory memorandum together with the main technical drawing and additional drawings, illustrations and annexes (including approvals, SEA report, a summary table of the proposals received during the procedure and their consideration, studies, analyses and other relevant annexes).
- The pre-selection drawings of the DSP location must indicate the location of the wind turbines, the existing and planned road network, existing and prospective electrical installations, including substations and line corridors and other civil engineering works necessary for the operation of the wind farm.
- The DSP solution must include conditions for issuing design specifications in order to allow for further specification of the wind farm by design specifications.

[2] A diagram of the procedure for the corresponding designated spatial plan can be found at: https://planeerimine.ee/wp-content/uploads/2023_KOV-EP_menetluse_skeem_tuuleparki-kavandava-KOV-EP-asukoha-eelvaliku-alusel-planeeringu-kehtestamine.pdf

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- The DSP documentation must be prepared in a form in accordance with the requirements established by Minister of Public Administration Regulation No 50 'Requirements for the Form and Structure of Spatial Plans' [*Planeeringu vormistamisele ja ülesehitusele esitatavad nõuded*] of 17 October 2019, the Planning Act, good practices, and submitted to the client digitally.
- The DSP procedure and all written documentation must be in Estonian.

1.4 Connections to relevant strategic development documents

Estonia's long-term objective is to transition to a low-carbon economy, which entails gradually transforming the economic and energy systems into more resource-efficient, productive and environmentally sustainable ones.

In the shorter term perspective, Estonia has set a goal that by 2030, the amount of renewable electricity produced will equal the total annual consumption of the country[3]. For this purpose, it is necessary to establish onshore wind farms with a capacity of at least 1 GW.[4]

1.4.1 Fundamentals of Estonian Climate Policy until 2050

The fundamentals of climate policy is a vision document, in which the principles and policy directions are set forth to be implemented in the future through the updating of sectoral development plans. The clear formulation and enforcement of policy directions also motivates the private sector and society at large to act in the same direction. The Fundamentals of Estonian Climate Policy until 2050, updated by the Riigikogu on 8 February 2023, stipulates that Estonia's long-term objective is to balance removals and emissions of greenhouse gases by 08.02.2023 at the latest, ie to reduce greenhouse gas net emissions to zero by that time.

Under the Fundamentals of Estonian Climate Policy, Estonia's long-term objective is to transition to a low-carbon economy, which means a gradual and targeted transformation of the economic and energy system into a more resource-efficient, productive and environmentally friendly one.

The proposed activities under the designated spatial plan are in line with the Fundamentals of Estonian Climate Policy.

1.4.2 Estonia's Energy Sector Development Plan 2030+ (ENMAK), ENMAK 2035 and the Energy Sector Organisation Act

ENMAK describes the objectives of Estonia's energy policy until 2030, the vision of the energy economy until 2050, general and sub-objectives and measures to achieve them. One of the objectives of the development plan is to promote the increase of the share of production and consumption of energy produced from renewable energy sources in Estonia.

According to ENMAK 2030, the task of the energy sector, as an industry serving other sectors of the economy and the residents of Estonia, is to ensure a favourable price for energy consumers and access to energy that takes environmental requirements into account. The electricity sector contributes to the competitiveness of the Estonian economy through the use of guaranteed security of supply, market-based end-user electricity prices and environmentally friendly solutions.

In shaping European energy policy, it is important to develop a market-based energy market primarily based on local and renewable energy sources within the European Union. According to the ENMAK 2030, renewable energy will account for 50% of Estonia's final energy consumption by the year 2030.

[3] https://valitsus.ee/valitsuse-eesmargid-ja-tegevused/rohepoliitika/taastuvenergia-arendamine
[4] Government Office of the Republic of Estonia 2022. Audit of accelerating the development of renewable energy.

From the perspective of European Union energy security, it is essential to move towards greater utilisation of primary energy sources found within the European Union to reduce dependence on imported energy.

The preparation of ENMAK 2035 was initiated on November 18, 2021, and the time for its submission to the Government of the Republic is 2024–2025.

As of 1 November 2022, § 32^1 of the Energy Sector Organisation Act sets out that by the year 2030, renewable energy accounts for at least 65% of gross domestic final consumption of energy. Renewable energy accounts for at least 100% of gross final consumption of electricity and for at least 63% of gross final consumption of thermal energy. Renewable energy used in road and rail transport accounts for at least 14% of total energy consumed in the transport sector.

The construction of the wind farm complies with the goals of ENMAK 2030+ as well as the Energy Sector Organisation Act. The construction of a wind farm will create favourable conditions for an increase in the share of electricity production from renewable energy sources.

1.4.3 Estonia's Climate Change Adaptation Development Plan until 2030

The strategic objective of the Climate Change Adaptation Development Plan is to increase the preparedness and ability of the Estonian state, at regional and local level, to adapt to the impacts of climate change.

When setting energy and security of supply objectives, the development plan sets the prevention of risks from climate change in energy networks and the use of renewable energy as one of the measures.

The activities of the action in the field of energy independence, security of supply and energy security are closely linked to the Estonia's Energy Sector Development Plan until 2030, increasing energy independence, security of supply and energy security, both now and in the event of an increase in more severe weather conditions and possible extreme weather events, both at national and regional level. The guiding principle of energy independence is independence from energy carrier imports, reliance on domestic fuels for energy production and renewable fuels in particular, the use of renewable energy sources and the diversification of the energy production portfolio.

The construction of wind farms is in line with the objectives of the Climate Change Adaptation Development Plan.

1.4.4 Valga county-wide spatial plan 2030+

The Valga county-wide spatial plan 2030+ has been brought into effect by Valga county governor's order No 1-1/17-417 of 15 December 2017.

The county-wide spatial plan stipulates that Valga County is not a nationally important area for wind energy development. It has been noted that, based on wind resources, small wind turbines can be developed for local small-scale consumption.

In connection with the increase in the need for renewable energy, the development of technology and the expected changes in national defence restrictions in Valga County, the planning of wind farms in Valga County has also become topical.

The county-wide spatial plan does not provide for specific renewable energy development areas in the county, the development is carried out taking into account the development interest and the availability of resources and through the conditions described below.

The Valga county-wide spatial plan sets the following conditions for the planning of wind turbines and wind farms:

- the plans and design specifications, or in the absence of an obligation to issue them, draft building permits or building notices, of all wind turbines and wind farms of any height, must

be coordinated with the Estonian Ministry of Defence. In order to ensure interests concerning national defence, it is necessary to start cooperating with the Ministry of Defence already at the initial stage of planning a wind turbine or wind farm;

- upon mapping out wind turbines, the minimum distance of the wind turbine from the national road must be equal to the total height of the wind turbine (height of mast and rotor blade) and the planning of wind turbines must adhere to measures to mitigate the risk of accidents;
- upon mapping out wind turbines, the minimum distance of the wind turbine from the railway protection zone must be equal to the total height of the wind turbine (height of mast and rotor blade) and the planning of wind turbines must adhere to measures to mitigate the risk of accidents;
- upon mapping out wind farms, attention must be paid to avoiding noise disturbance and, if necessary, developing mitigation measures. When mapping out new wind farms, the goal must be to ensure the most stringent industrial noise equivalent limit values under legislation, ie 50 dB during the day and 40 dB at night for category II residential land;
- upon mapping out wind turbines and wind farms, as objects that dominate the landscape, adhere to the preservation of landscape values.

Upon preparing a designated spatial plan, the plan is to adhere to the conditions for the development of wind farms set out in the county-wide spatial plan. Upon preparing a designated spatial plan, the need to amend or clarify the county-wide spatial plan is decided in cooperation with the Ministry of Regional Affairs and Agriculture.

1.4.5 Comprehensive spatial plan of Tõlliste rural municipality

The comprehensive spatial plan of Tõlliste rural municipality has been brought into effect under the Tõlliste Rural Municipality Council's Regulation No 9 of 17 June 2006. The comprehensive spatial plan has been reviewed by the Tõlliste Rural Municipality Council with resolution No 5 of 8 March 2010 and resolution No 7 of 17 March 2014.

According to the main drawing of the Tõlliste rural municipality's comprehensive spatial plan, the area of the designated spatial plan coincides with the area of the green network corridor, the area valued at county-level, the support area of the green network.

The comprehensive spatial plan does not address the issue of renewable energy and wind turbines.

1.4.6 Comprehensive spatial plan of Õru rural municipality

The comprehensive spatial plan of Õru rural municipality has been brought into effect under the Õru Rural Municipality Council's Regulation No 6 of 14 July 2006. The comprehensive spatial plan has been reviewed by Õru Rural Municipality Council with resolution No 5 of 19 February 2010 and resolution No 10 of 14 March 2014.

According to the main drawing of the Õru rural municipality's comprehensive spatial plan, the area of the designated spatial plan coincides with the area of the green network corridor and the support area of the green network.

The comprehensive spatial plan does not address the issue of renewable energy and wind turbines.

1.4.7 Valga rural municipality's comprehensive spatial plan under preparation

The creation of the comprehensive spatial plan and of its strategic environmental assessment of Valga rural municipality has been initiated under the Valga Rural Municipality Council resolution No 74 of 28 September 2018.

As at March 2024, the draft comprehensive spatial plan of Valga rural municipality has not yet been made public. Within the framework of the Valga comprehensive spatial plan being created, an analysis has been carried out for the planning of wind farms in Valga rural municipality, but during the creation of the comprehensive spatial plan, it was decided to solve the planning of wind farms through a designated spatial plan. An additional choice of location for wind farms under the comprehensive spatial plan is not planned. When preparing a SEA for the designated spatial plan, the analysis conducted in the preparation of the comprehensive spatial plan is adhered to, among other things. Also, the comprehensive spatial plan being prepared when preparing the designated spatial plan is taken into account. The designated spatial plan may reveal additional inputs to the comprehensive spatial plan (eg proposals to supplement the green network) and the designated spatial plan may need to take into account what is planned in the comprehensive spatial plan (eg prospective extensions of residential areas).

1.5 Initial identification of potentially suitable areas

As a result of the initial spatial analysis within the DSP planning area, potentially suitable areas for planning wind farms have been identified. **Potentially suitable areas are not the areas pre-selected for the location of the wind farm.** Potentially suitable areas are areas where further analysis will have to be carried out and where additional possible restrictions will become clear during the further preparation of the plan. However, it is highly unlikely that it will be possible to plan a wind farm outside potentially suitable areas, ie to find areas pre-selected for the location, based on the information already available. Mapping potentially suitable areas is necessary to determine the assessment scope of the SEA.

Potentially suitable areas were identified on the basis of the following exclusionary criteria:

- Areas closer than 1,000 m to residential buildings were excluded (a reduction in distance up to 750 m may be considered when preparing the plan if the landowner gives their consent in writing during the DSP procedure and compliance with the noise limit value is ensured. In addition, areas within 2,000 m of densely populated areas were excluded. Such distances in most cases ensure compliance with noise standards and meet the distance criteria[5] recommended by public authorities. With regard to residential buildings, the initial analysis was based on the location of ETD's residential and public buildings and, with regard to the boundaries of densely populated areas, on the working version of the comprehensive spatial plan of Valga rural municipality.
- The following areas were excluded: protected areas, limited-conservation areas, species' protection sites, including areas of protected objects to be designed, where it is generally not possible to plan construction activities based on the current conservation policy.
- Species protection sites formed to protect plant habitats were excluded with a buffer of 100 m to prevent adverse impact on the habitats. The selection of the criterion was based on the recommendation[6] of the Estonian Environmental Board.
- Species' protection sites of the Eurasian capercaillie were excluded with a buffer of 1 km in order to prevent significant direct adverse impacts on the species' protection sites of the protected category II bird species. The selection of the criterion was based on the recommendation of the Estonian Environmental Board.
- Two kilometres of all species' protection sites of protected category I bird species and finding sites located in areas under protection were excluded.

[5] Ministry of Economic Affairs and Communications Letter No 17-7/2019/2142 of 13 March 2019 'Reflecting renewable energy in the comprehensive spatial plans of local governments' (registered in the document register of Valga Rural Municipality Government on 13 March 2021 under No 9-1.3/1124)

[6] On the impact of onshore wind farms on biota and the recommendations of the Estonian Environmental Board on their planning in the comprehensive spatial plans of local governments (28 June 2021)

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The results of the initial map analysis have been submitted Figure 2. The figure does not show the very small areas created by the map analysis, where it is clearly not possible to build a wind farm. According to the initial map analysis, four potentially suitable areas remain in the designated spatial plan area. For areas 1 and 3, there is an overlap with the potential wind energy priority development area Valga–Tõrva, which is being explored by the state.

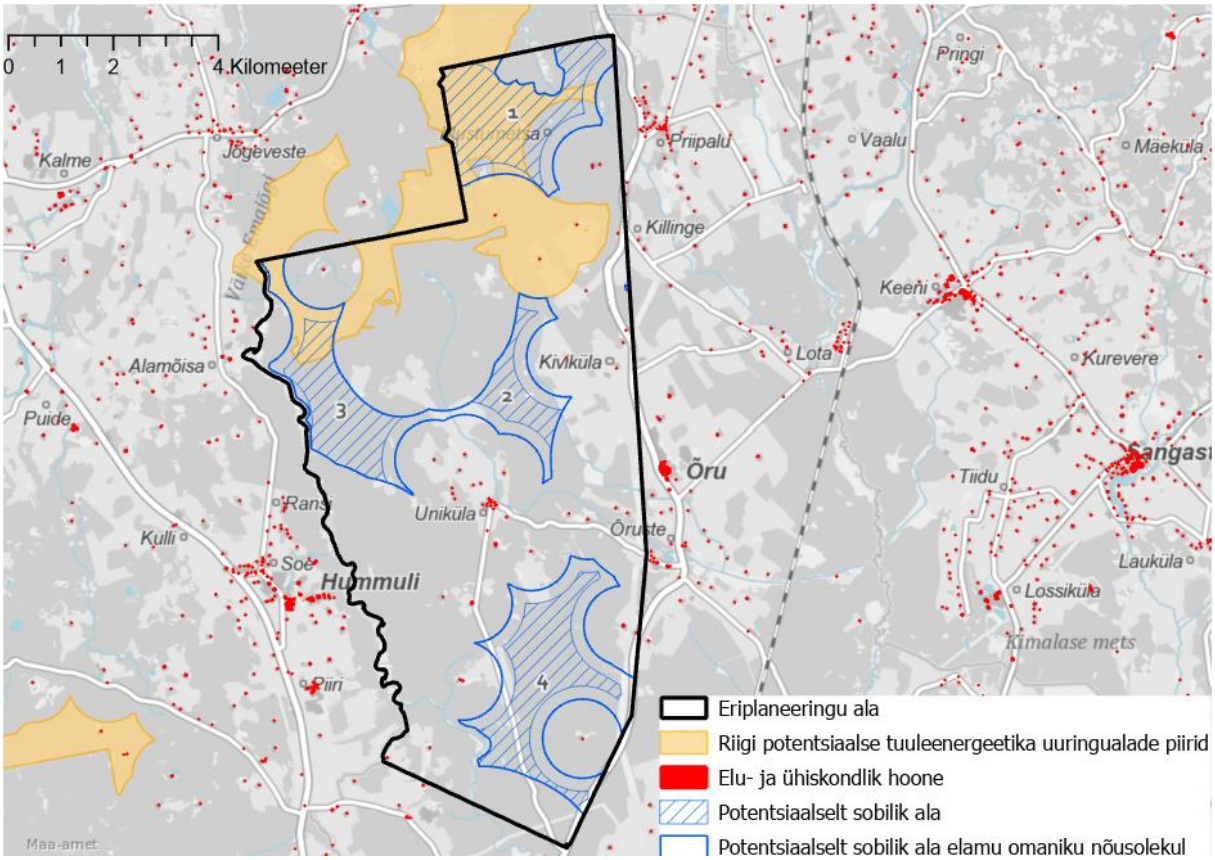

Figure 2. Potentially suitable areas mapped by initial spatial analysis.

2 Strategic environmental assessment programme

2.1 Purpose

The SEA is an assessment carried out, with the participation of the public and the relevant authorities, in order to identify the significant environmental impacts of the implementation of a strategic planning document, to identify alternative options and measures to mitigate adverse impacts, the results of which are taken into account in the preparation of the strategic planning document and for which a proper report is drawn up.

Pursuant to the Environmental Impact Assessment and Environmental Management System Act, the **purpose of the SEA** is to contribute to the integration of environmental considerations into the preparation and adoption of strategic planning documents, provide for a high level of protection of the environment and promote sustainable development.

Pursuant to clause 5 of subsection 2 of § 4 of the Planning Act, in the framework of the DSP, the relevant economic, cultural, social and natural environmental impacts of the implementation of the spatial plan must be assessed, the spatial impacts on the environment must be assessed and the positive and negative aspects of the proposed activities, the tolerance limit of the environment and the possibilities and measures to prevent and/or mitigate adverse impacts must be identified.

In the SEA process of the wind farm, the environment is traditionally treated not only as a natural environment, but more broadly – during the SEA process, relevant social and cultural impacts are additionally assessed, including the impact on human health, **according to the assessment scope to be determined in the SEA programme**. Thus, in the case of the present SEA, an assessment of impacts as set out in subsection 4 of § 40 of the Environmental Impact Assessment and Environmental Management System Act and subsection 2 of § 4 of the Planning Act is proposed.

2.2 Methodology

The SEA is prepared in accordance with the requirements of the relevant legislation in force in Estonia and the European Union. In preparing the SEA report, the requirements set out in § 40 of the Environmental Impact Assessment and Environmental Management System Act are adhered to, taking into account, among other things, the objectives of the strategic planning document. Pursuant clause 2 of subsection 3 of § 40 of the Environmental Impact Assessment and Environmental Management System Act, upon preparation of the SEA report, the content and level of establishment of the strategic planning document must be taken into account.

The assessment will be based on relevant methodological guidance materials such as the Strategic Environmental Assessment Handbook[7] and the Environmental Impact Assessment Handbook[8]. In addition, the environmental impact assessment will take into account the knowledge of the leading expert and the working group on environmental impact assessment and the generally accepted assessment methodology.

In determining the significance of the impacts, the logic established under the provisions of legislation is primarily taken into account. According to the Environmental Impact Assessment and Environmental Management System Act, environmental impact is significant where it is likely to exceed the environmental capacity of the impact area, cause irreversible changes to the environment, endanger human health and well-being, the environment, cultural heritage or property. In areas of impact for which the limit values do not apply or where there may be adverse impact not exceeding the limit values, the probability of environmental disturbance would be assessed. Environmental disturbance is

[7] Peterson, K., Kutsar, R., Metspalu, P., Vahtrus, S. and Kalle, H. 2017. Strategic Environmental Assessment Handbook.

[8] Põder, T. 2017. Environmental Impact Assessment Handbook.

the direct or indirect adverse impact of human activities on the environment, including impact through the environment on human health, well-being or property, or on cultural heritage. Environmental disturbance is also such an adverse effect on the environment that does not exceed the numerical standard or is not regulated by a numerical standard.

In the course of the SEA, the following operations are carried out:

- description of the impacted environment is prepared and an assessment of the state of the environment is made based on databases (EELIS (Estonian Nature Information System), Estonian Environment Agency, Land Board, Metsaportaal (Forest Portal), Statistics Estonia database, data layers of the Estonian Environment Agency, etc);
- description of the proposed activity, its purpose and need;
- during the integrated process of pre-selection of the location of the designated spatial plan and the SEA, possible locations suitable for the location of the wind farm within the designated spatial plan area are analysed. As a result of the analysis, the most suitable solution for the parties and taking into account the environment is found;
- the potential significant impacts of the proposed activity on the environment are identified, the extent of the impacts is defined, the consequences for the environment are assessed. The starting point is the nature of the special plan as a strategic spatial development document – the impact assessment maintains the accuracy of the relevant stage of the designated spatial plan and focuses on topics that can be regulated in the preparation of the relevant stage of the designated spatial plan and that are important for the planning solution stage;
- a description of the method used to predict the expected significant impacts on the environment caused by the proposed activity and its realistic alternative options are provided. The assessments are meant to be carried out predominantly in the form of expert assessment, modelling is used in the assessment of noise and shadow flicker, and photomontages are used to illustrate visual impacts;
- possible cumulative impacts, indirect impacts and interactions with other types of activities are being assessed;
- an assessment is made of the feasibility of using the natural resource and of the compatibility of the proposed activity and its realistic alternative options with the principles of sustainable development;
- measures to prevent or reduce the associated adverse impacts on the environment are described and the expected effectiveness of their use is assessed;
- if necessary, the need for and scope of studies / expert assessments necessary for issuing the design specifications for the wind farm will be indicated;
- relying on the results of the environmental impact assessment of the proposed activity and its realistic alternative options, reasoned proposals are made for setting conditions for environmental monitoring;
- During the preparation of the SEA and the designated spatial plan, acquaintance with the area takes place in nature, work meetings and seminars are held, and the available materials of plans, studies, state and county development plans and other relevant sources are used. Authorities with important information and the public are consulted. Cooperation is carried out between officials of the rural municipality government, local residents, persons who prepared the planning document and environmental experts;
- opinions and questions on the spatial plan and the SEA report are being examined, the copies of which are attached to the materials of the spatial plan, and answers to opinions and letters sent to the enquirers are provided, explaining how the opinions expressed have been taken into account, justifying the non-consideration of proposals and answering questions; minutes of public discussions are also attached to the planning materials;

- where appropriate, the difficulties encountered in the environmental impact assessment and in the preparation of the report are identified;
- an overview of the environmental impact assessment and public participation will be provided.

2.3 Spatial extent of the SEA

Pursuant to Valga Rural Municipality Council resolution No 96 of 31 January 2024, the designated spatial plan for the Valga rural municipality will be prepared for an area of about 7,400 ha. The designated spatial plan area is the spatial extent and direct impact area of the SEA (Figure 1).

For impacts, where appropriate, areas outside the designated spatial plan area are also be considered as an impact area. The extent of the impact area depends very much on the type of impact and the receptor of the impact. For example, for different species of birds, the impact area of a wind turbine can be of very different ranges and reach 20 kilometres[9]. The area of impact that affects a person spatially the most is visual impact. In terms of visual impact, the impact may occur not only on the territory of Valga rural municipality, but the territory of Tõrva rural municipality, Otepää rural municipality and the Republic of Latvia may also be impacted. Thus, it is likely that the natural environment of the surrounding villages will also be impacted (in particular, impacts on wild birds are possible) and the population (effects of noise and shadow flicker, as well as visual impacts).

2.4 Overview of the environment impacted by the designated spatial plan area

As described in Chapter 2.3, the area covered by these initial positions of the DSP and the SEA programme in Valga rural municipality has an approximate area of 7,400 ha. The DSP area comprises a total of four potentially suitable areas for the construction of wind turbines (Figure 2) .

2.4.1 Human settlement and infrastructure

Valga rural municipality is located in Valga County. In Valga municipality, there is one town (Valga), three small towns (Laatre, Tsirguliina and Õru) and 48 villages. Valga rural municipality covers an area of 745 km^2 and has a population of 15,227 as of 1 January 2024. Of the regions, Tsirguliina had the largest population in 2023 (383), followed by the localities of Kaagjärve (241) and Lüllemäe (212).

Based on the ETD data, 49 residential or public buildings are located in the designated spatial plan area.

The Ministry of[10] Economic Affairs and Communications has recommended planning a distance of more than 1,000 m between residential and public buildings and wind turbines, and a distance of 2,000 m from densely populated areas (towns, small towns). With the consent of the landowner, wind turbines may be installed closer than 1,000 m to the landowner's dwelling, provided that a compliant noise limit value is ensured. The location of 1 and 2 km buffers of residential and densely populated areas, respectively, is depicted on Figure 3.

[9] Action plan for the protection of the black stork (*Ciconia nigra*). APPROVED by directive No 1-1/18/105 of 14 February 2018 of the Director General of the Estonian Environmental Board.

[10] Ministry of Economic Affairs and Communications Letter No 17-7/2019/2142 of 13 March 2019 'Reflecting renewable energy in the comprehensive spatial plans of local governments' (registered in the document register of Valga Rural Municipality Government on 13 March 2021 under No 9-1.3/1124).

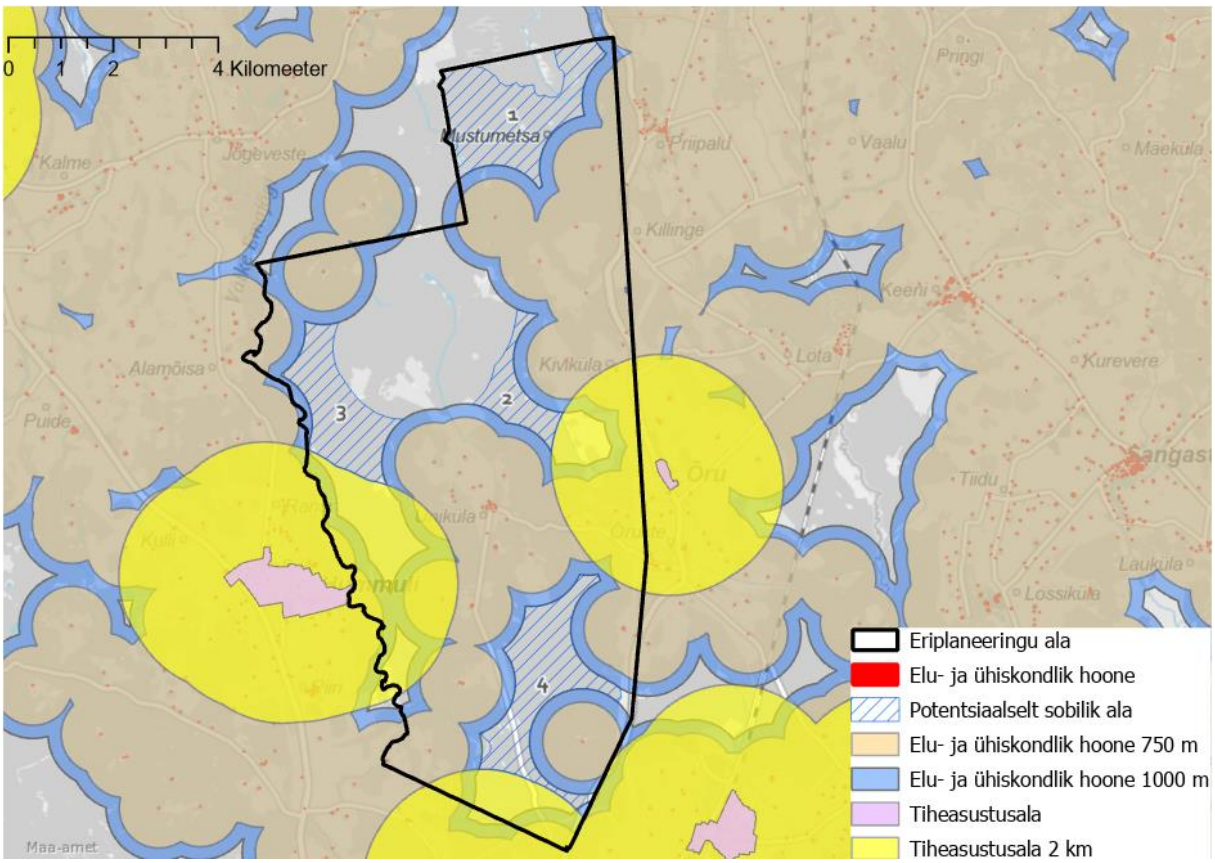

Figure 3. The location of residential and public buildings in relation to the designated spatial plan area and potentially suitable areas. Basis: ETD 8 February 2024.

The designated spatial plan area is crossed by the Jõhvi–Tartu–Valga main road No 3 and the Tõlliste–Uniküla–Õruste secondary road No 23123, the latter of which also overlaps with the potentially suitable area 4. From 17 November 2023, the Minister of Climate Regulation No 71 'Standards for the Design of Roads' [„*Tee projekteerimise normid*"] is in effect. According to the regulation, the minimum distance of a wind turbine from the edge of the road surface is determined by the formula L=(H + 0.5D), where: 1) L is the minimum distance of the wind turbine from the edge of the road surface in metres; 2) H is the height of the tower of the wind turbine in metres; 3) D is the diameter of the rotor or blade of the wind turbine in metres. The restriction must be taken into account upon preparation of the designated spatial plan.

There is a railway about 2.3 km to the west from the potentially suitable area 4. When designing wind turbines, it must be taken into account that wind turbines must not be located closer to the railway than (H+D) (including H = height of the wind turbine tower and D = diameter of the rotor or impeller).

Elering's electricity infrastructure objects in and near the planning area include the following: a 110 kV overhead line L145 Tsirguliina-Tõrva and 330 kV overhead lines L301 Tartu-Valmiera and L353 Viru-Tsirguliina, for it is necessary to take into account the protection zone where activity is limited. The extent of the protection zone and the procedure for operating in the protection zone are set out in the Minister of Economic Affairs and Infrastructure Regulation No 73 of 25 June 2015 adopted on the basis of subsection 8 of § 70 of the Estonian Building Code. All intersections with Elering's infrastructure and planned activities in the protection zone must be coordinated with Elering. Elering's gas infrastructure objects are not located in the planning area.

According to Elering AS,[11] the clearance of wind turbines from the 110 and 330 kV power lines is considered in accordance with the current standard EVS-EN 50341-2-20:2018 Overhead electrical lines exceeding AC 1 kV - Part 2-20: National Normative Aspects (NNA) for Estonia. According to this standard, the minimum horizontal clearance between the axis of the tower of the wind turbine and the closest conductor of the overhead line with no wind shall be double the height of the wind turbine tower.

2.4.2 Aquatic environment

According to the 1:400,000 map of the protection of Estonian groundwater, potentially suitable areas are relatively protected groundwater or areas with protected groundwater. There are no drilled wells located in any potentially suitable wind farm area (Figure 4).

The designated spatial plan area covers the Lower–Middle-Devonian groundwater body in the Eastern Estonia river basin (overall status good), the Middle-Devonian groundwater body in the Eastern Estonia river basin district (overall status poor) and the Silurian-Ordovician groundwater body under the Devonian layers in the Eastern Estonia river basin (overall status good).

The area of the designated spatial plan includes the following standing water bodies: Väike-Virna Lake (VEE2116200) and Lake Virna (VEE2116400). Both are natural lakes. The lakes do not overlap with potentially suitable wind farm areas (Figure 4).

The area of the designated spatial plan includes the following watercourses: Sauniku stream (VEE1012800, overlaps with potential suitable wind farm area 1), Soontaga stream (VEE1012700, overlaps with potential suitable wind farm area 1), Lota stream (Keerdi stream) (VEE1011500), Kooba stream (VEE1008223), Raamsoo stream (VEE1011800, overlaps with potential suitable wind farm area 2), Õru stream (VEE1011700), Kalda ditch (VEE1008219, overlaps with potential suitable wind farm area 3), Väike Emajõgi (VEE1008200, overlaps with potential suitable wind farm area 4) and Naadimõtsa ditch (VEE1011902, overlaps with potential suitable wind farm area 4) (Figure 4).

All initially potentially suitable areas partially overlap with land improvement system areas (Figure 5).

[11] 6 March 2024 No 11-4/2024/130-2

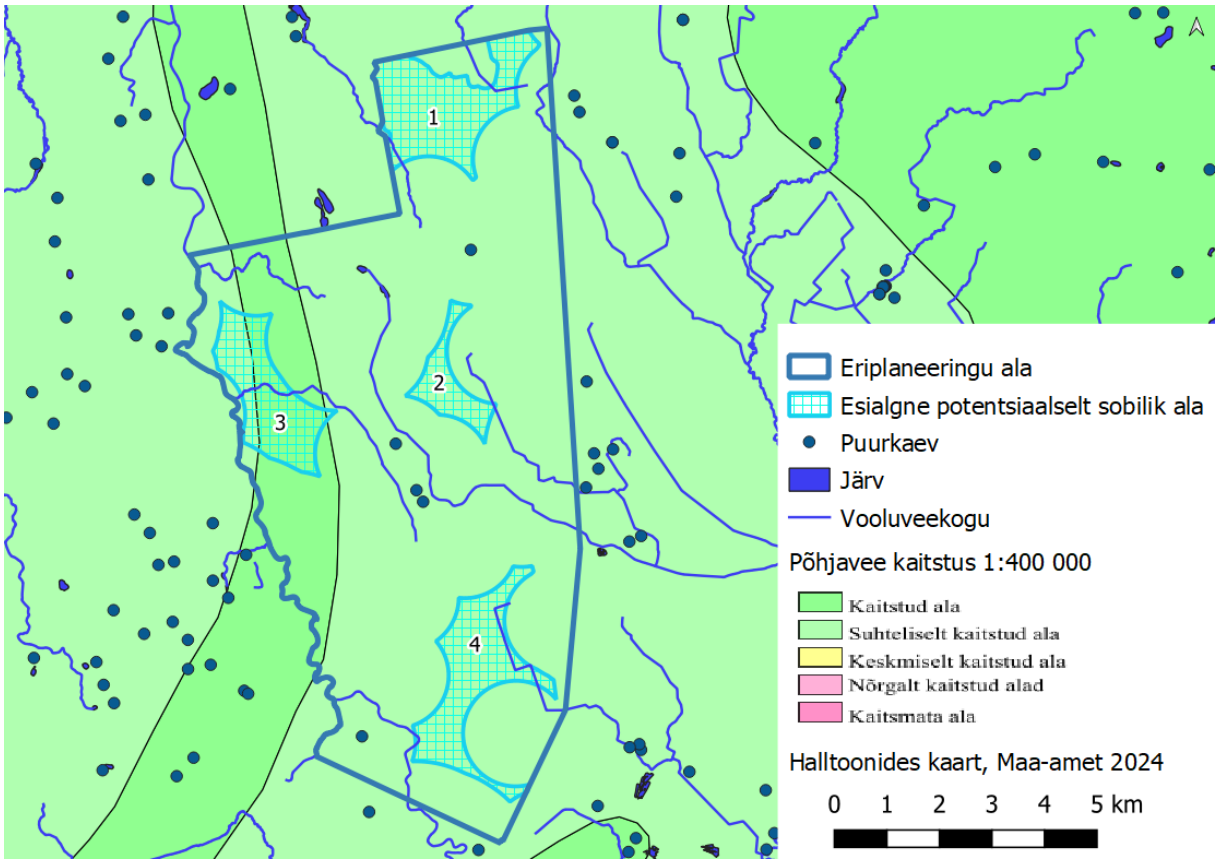

Figure 4. Groundwater protection of initial potentially suitable areas, location of drilled wells and water bodies.

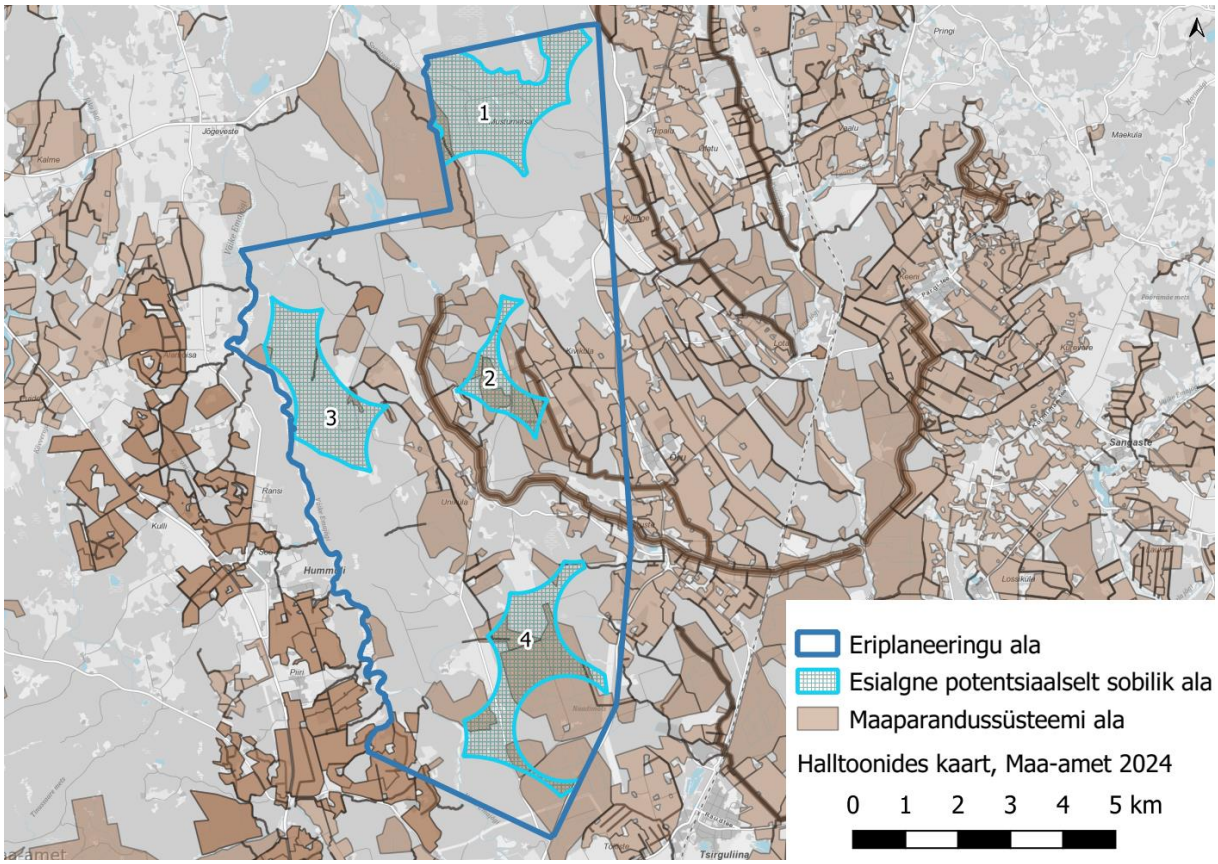

Figure 5. The location of initially potentially suitable areas in relation to areas of the land improvement system.

2.4.3 Mineral deposits and natural resources

The designated spatial plan area includes three mineral deposits registered in the register of mineral resources: The Priipalu peat deposit (registry card No 134, which is also partly a peatland suitable for extraction, adjoins the initial potentially suitable area 1), the Õru peat deposit (registry card No 688) and the Rumba sand deposit (registry card No 892, to which extraction permit No L.MK/322524 (Rumba sand quarry) has been issued). None of the initial potentially suitable wind farm areas overlap with the mineral deposit (Figure 6).

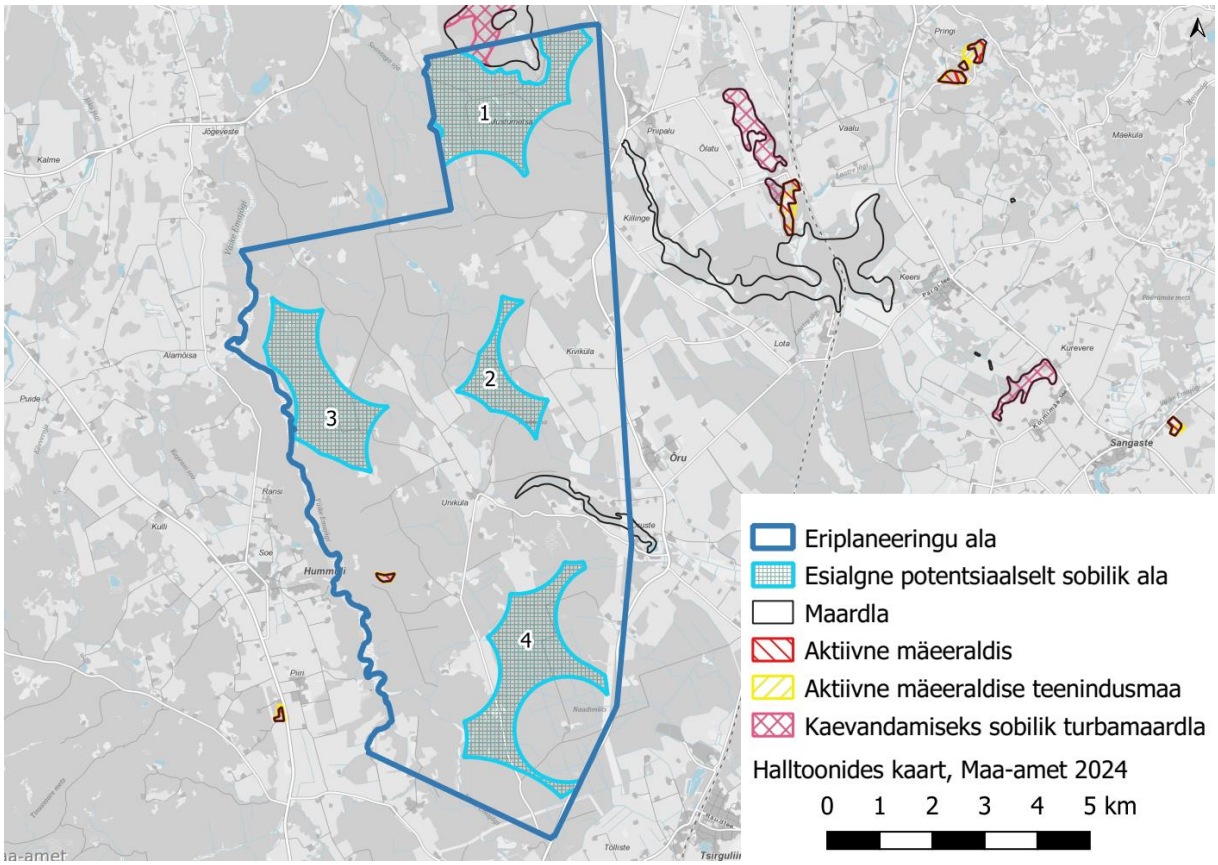

Figure 6. Location of mineral deposits and mining claims in the designated spatial plan area. WFS data on mineral deposits as of 5 March 2024.

Of the potentially suitable areas, there is little overlap in areas 2 and 3 with valuable agricultural land (Figure 7).

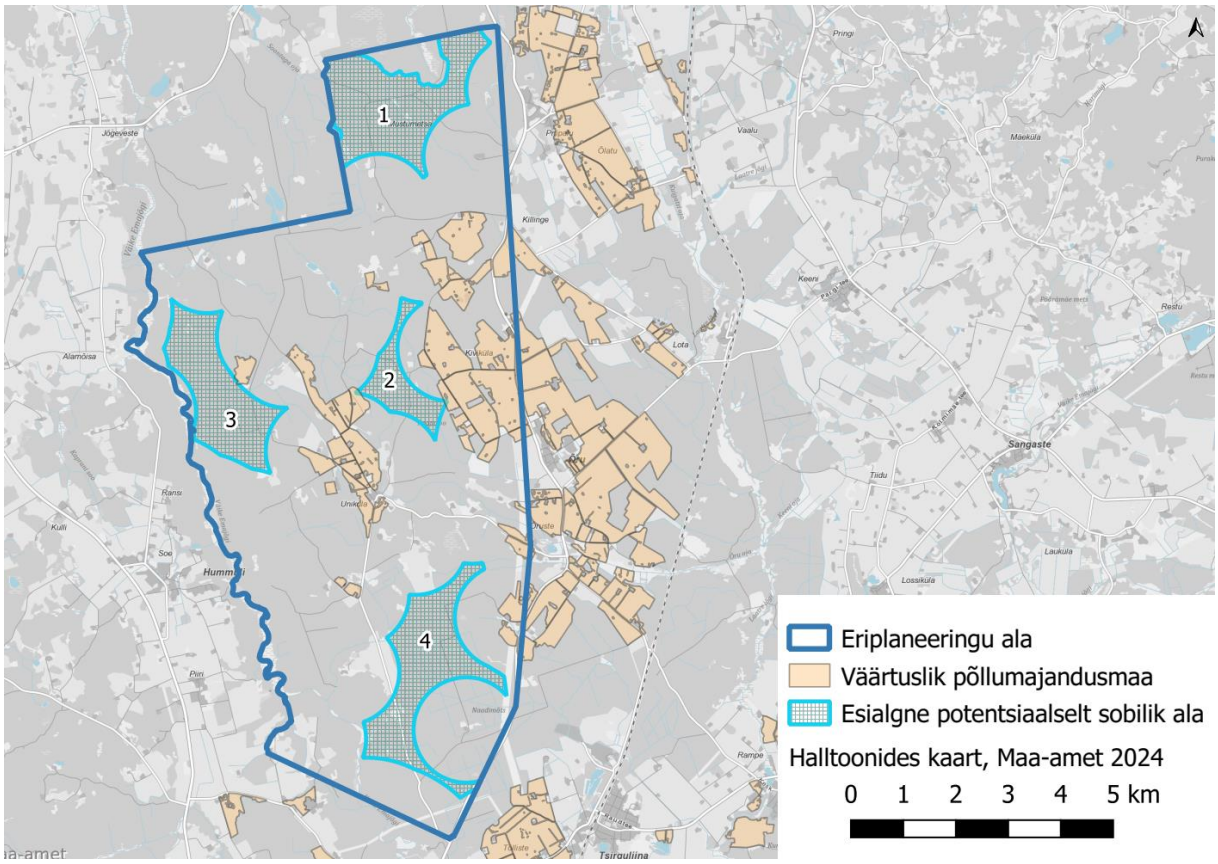

Figure 7. Location of potentially suitable wind farm areas in relation to valuable agricultural land according to the comprehensive spatial plan of the Valga rural municipality.

2.4.4 Cultural heritage

There are no cultural monuments or their restricted zones in the initial potentially suitable area 1 within the designated spatial plan area. The following cultural heritage objects are located in the initial potentially suitable area 1: Peat pits (code: 608:TVK:001, condition: 50–90% preserved from the object or its original functionality), Mustumetsa forest ranger site (code: 943:VKK:004, condition: 20–50% preserved from the object or its original functionality) and the Metsaveo railway (code: 943:RTR:001, condition: type to be determined, less than 20% preserved from the object or its original functionality) (Figure 8).

There are no cultural monuments or their restricted zones or cultural heritage objects in the initial potentially suitable area 2 within the designated spatial plan area (Figure 8).

There are no cultural monuments or their restricted zones in the initial potentially suitable area 3 within the designated spatial plan area. The following cultural heritage objects are located in the initial potentially suitable area 3: Sõgelsepa forest path (code: 943:MET:001, condition: object well or very well preserved), Sõgelsepa boundary line (code: 943:MEK:001, condition: object well or very well preserved) and Uniküla missile base (code: 943:OKU:002, condition: 50–90% preserved from the object or its original functionality) (Figure 8).

There are no cultural monuments or their restricted zones in the initial potentially suitable area 4 within the designated spatial plan area. The following cultural heritage objects are located in the initial potentially suitable area 4: Tõlliste municipality building (code: 820:VAL:002, condition: signs have been preserved in the landscape, but do not allow unambiguous determination of type), Magasiait (code: 820:MAG:001, condition: 50–90% preserved from the object or its original functionality) and

Initial positions for pre-selection of a location for the municipal designated special plan of wind farms of Valga rural municipality, and impact assessment, including the strategic environmental assessment programme *Version: 09.04.2024*

Vana Tartu-Valga highway (code: 820:MNT:002, condition: 50–90% preserved from the object or its original functionality) (Figure 8).

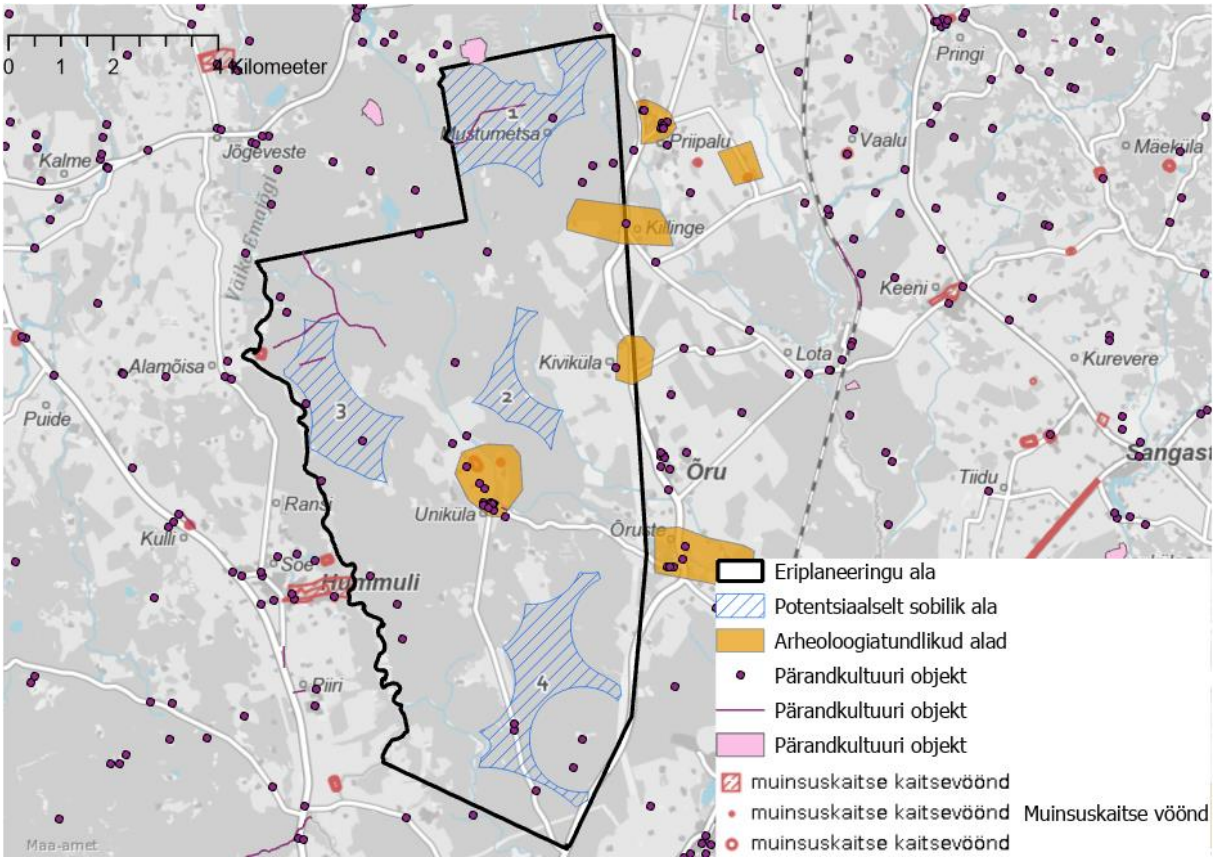

Figure 8. The designated spatial plan area includes cultural monuments, cultural heritage objects, archaeologically sensitive areas and valuable landscapes.

2.4.5 National defence and other technical restrictions

Based on the restrictions data of the Land Board's geoportal, there are no national defence buildings and their restriction zones in the designated spatial plan area. There are also no known aviation restrictions on the territory of the designated spatial plan area, based on the Aviation Data map of the Land Board.

2.4.6 Natural environment

2.4.6.1 Protected areas

The designated spatial plan overlaps to a small extent with the Õru limited-conservation area (KLO2000105). In addition, the designated spatial plan area includes three species' protection sites (species' protection site of Sauniu orchids (KLO3001211), species' protection site of the Virna Eurasian capercaillie (KLO3000076), species' protection site of Tõlliste *Swertia perennis* (KLO3002336)). In addition, the designated spatial plan area also overlaps with one of the protected areas to be designed (PLO1000653 the species' protection site of the Virna Eurasian capercaillie, largely overlaps with the existing species' protection site). None of the above-mentioned limited-conservation areas, species' protection sites or designed protected areas overlap with the initial potentially suitable wind area (Figure 9).

The potentially suitable area 1 includes the habitat of the Eurasian capercaillie KLO9131764 (category II). No habitats of protected animal species have been recorded in areas 2, 3 and 4.

As for the species' protection sites for birds, 14 km of the species' protection site of the black stork and 3.5 km of the species' protection site of the lesser spotted eagle are considered to be a possible impact areas. Within the impact radius are the Rampe species' protection site of the black stork (KLO3002099, about 3 km from the area TU4), Mõneku species' protection site of the black stork (KLO3002099, about 3.7 km from the area TU4) and the Supa species' protection site of the lesser spotted eagle (KLO3001727, about 2.9 km from the area TU4).

Of the areas the conservation objective of which is bird species, the Soontaga Nature Reserve (KLO1000264, approx. 1.8 km of the area TU1) is located within the impact area of the potentially suitable areas. The conservation objective of the Soontaga Nature Reserve:

1) the conservation of the habitat types referred to in Annex I to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, namely Northern boreal alluvial meadows (6450)3, Western Taïga (9010*), Fennoscandian herb-rich forests with Picea abies (9050), Fennoscandian herb-rich forests with Picea abies (9080*) and bog woodland (91D0*);
2) the conservation of the species referred to in Annex I to Council Directive 79/409/EEC on the conservation of wild birds, which are also protected species in categories I and II (black stork, osprey, Eurasian capercaillie);
3) the conservation of a protected category II plant species typical of the site, namely Eastern pasqueflower (*Pulsatilla patens*);
4) preservation of the genetic pool of the Baltic pine (*Pinus sylvestris*).

The designated spatial plan area is adjacent to several protected areas to be designed. To the northwest of the designated spatial plan area are the extension of the Soontaga Nature Reserve (PLO1001323), the Soontaga forest reserve (PLO1001028), the Sikaküla Nature Reserve.

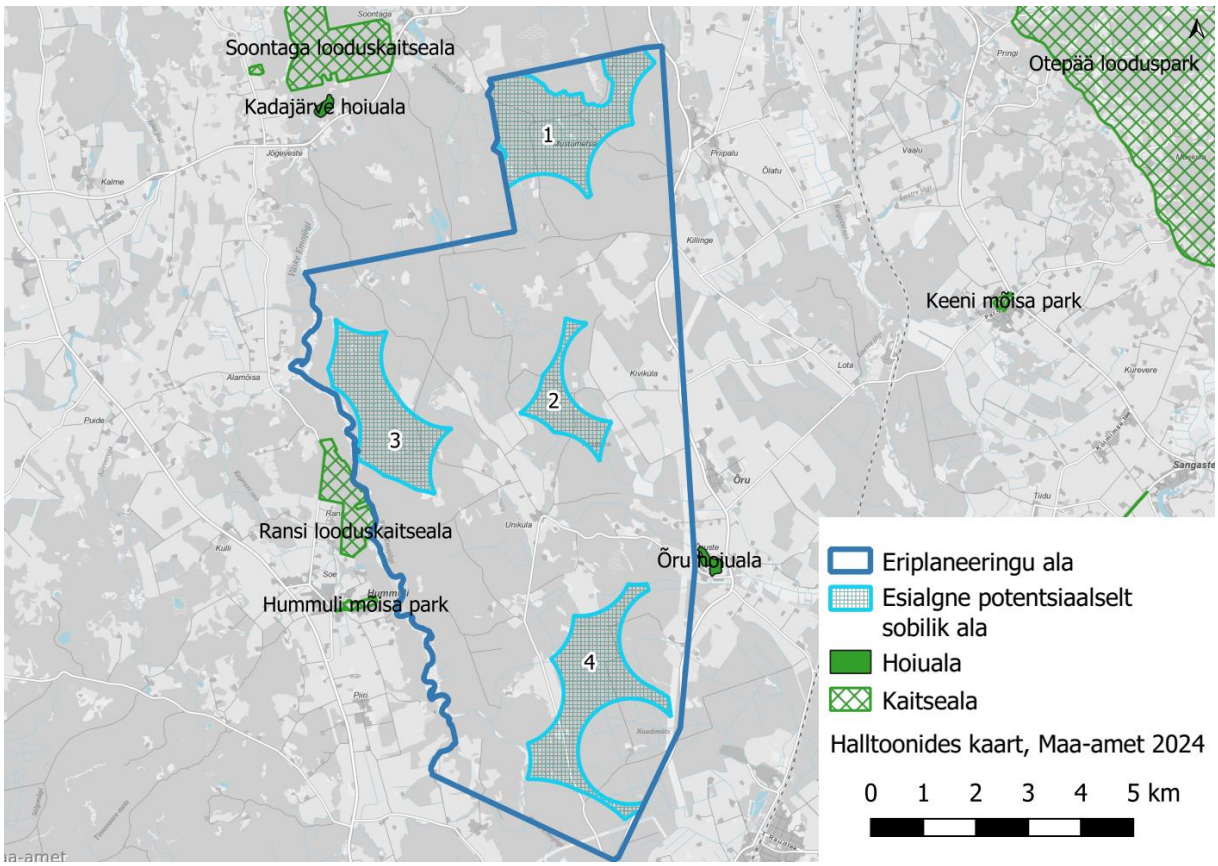

Figure 9. Location of protected areas and limited-conservation areas in relation to the designated spatial plan area. Pursuant to the Nature Conservation Act, the location of species' protection sites

Initial positions for pre-selection of a location for the municipal designated special plan of wind farms of Valga rural municipality, and impact assessment, including the strategic environmental assessment programme *Version: 09.04.2024*

is not displayed on the drawing. Basis EELIS (Estonian Nature Information System), Estonian Environment Agency, 10 January 2024.

2.4.6.2 Ecologically high value biotic communities[12]

The initial potentially suitable area 1 overlaps with the following key forest habitats (VEP): VEP No 150006, VEP No 210405, VEP No 127077, VEP No 208500 and VEP No 127074. Area 1 includes bog woodland (91D0*), Western Taiga (9010*) and Fennoscandian herb-rich forests with Picea abies (9080*) of the habitats directive habitat types.

The initial potentially suitable area 2 does not overlap with key habitats. Area 2 includes the Habitats Directive habitat type: forests with Picea abies (9080*).

The initial potentially suitable area 3 overlaps with the following key habitats (VEP): VEP No127076, VEP No127085, VEP No127212, VEP No127143, VEP No 127144, VEP No 205347, VEP No 204262, VEP No 204263 and VEP No 204264. Area 3 includes the following habitat types as set out in the Habitats Directive: Western Taiga (9010*), bog woodlands (91D0*) and Northern boreal alluvial meadows (6450).

The initial potentially suitable area 4 overlaps with the following key habitats (VEP): VEP No 127151, VEP No 204543 and VEP No 206741. Area 4 includes the Habitats Directive habitat type Northern boreal alluvial meadows (6450).

Based on the map layer of the state of ecosystems in the ELME project[13] of the Estonian Environment Agency, in all initially potentially suitable areas, the status classes of generalized ecosystems are poor, medium and, to a lesser extent, good.

There are no known finding sites of protected plants, fungi or lichens in initially potentially suitable areas 2 and 4.

The following protected category III plant species remain in the initially potentially suitable area 1: the common spotted orchid (*Dactylorhiza fuchsii*, KLO9349172, KLO9349171), the lesser butterfly-orchid (*Platanthera bifolia*, KLO9349320, KLO9349321), the *Dactylorhiza baltica* (KLO9349165), the greater butterfly-orchid (*Platanthera chlorantha*, KLO9349323), *Neckera pennata (*KLO9403015) and the early marsh-orchid (*Dactylorhiza incarnata*), KLO9349390, KLO9349389).

The following protected category III plant species remain in the initial potentially suitable area 3: *Anastrophyllum hellerianum* (KLO9402068), creeping lady's-tresses (*Goodyera repens*, KLO9345850), *Neckera pennata (*KLO9402079), *Sphagnum wulfianum (*KLO9402084) and heath spotted-orchid (*Dactylorhiza maculata*, KLO9349377).

2.4.6.3 Wild birds

The biota group most sensitive to wind farms is birds. Based on the analysis[14] of the terrestrial bird population completed by the Estonian Ornithological Society and Kotkaklubi at the end of 2022, overlap with zone 1 and zone 2 areas (Figure 10) according to the analysis has been highlighted for all potentially suitable areas. The terrestrial bird analysis provides information on which areas need to be paid attention to when planning sites with a significant spatial impact, since they may have a greater or lesser impact on bird species, and need also be taken into account. This is the best knowledge

[12] In this document, key forest habitats, semi-natural biotic communities, and habitat types set out in the Habitats Directive are considered ecologically high value biotic communities.

[13] https://keskkonnaportaal.ee/et/elme-kaardikihtide-kataloog-2021

[14] https://kliimaministeerium.ee/elurikkus-keskkonnakaitse/looduskaitse/uuringud-projektid-ja-analuusid#analuus-ja-lisad

gathered by experts, but a legally recommended auxiliary material, the purpose of which is to give bird protection recommendations for planning wind farms. The analysis also allows for easier comparisons[15] between different areas from the perspective of bird conservation.

Zone 1 and zone 2 areas are not excluded at stage of the SEA programme, but it must be taken into account that in areas overlapping with zone 1 and zone 2 areas, there may be restrictions on the planning of wind turbines and the implementation of mitigation measures may be necessary.

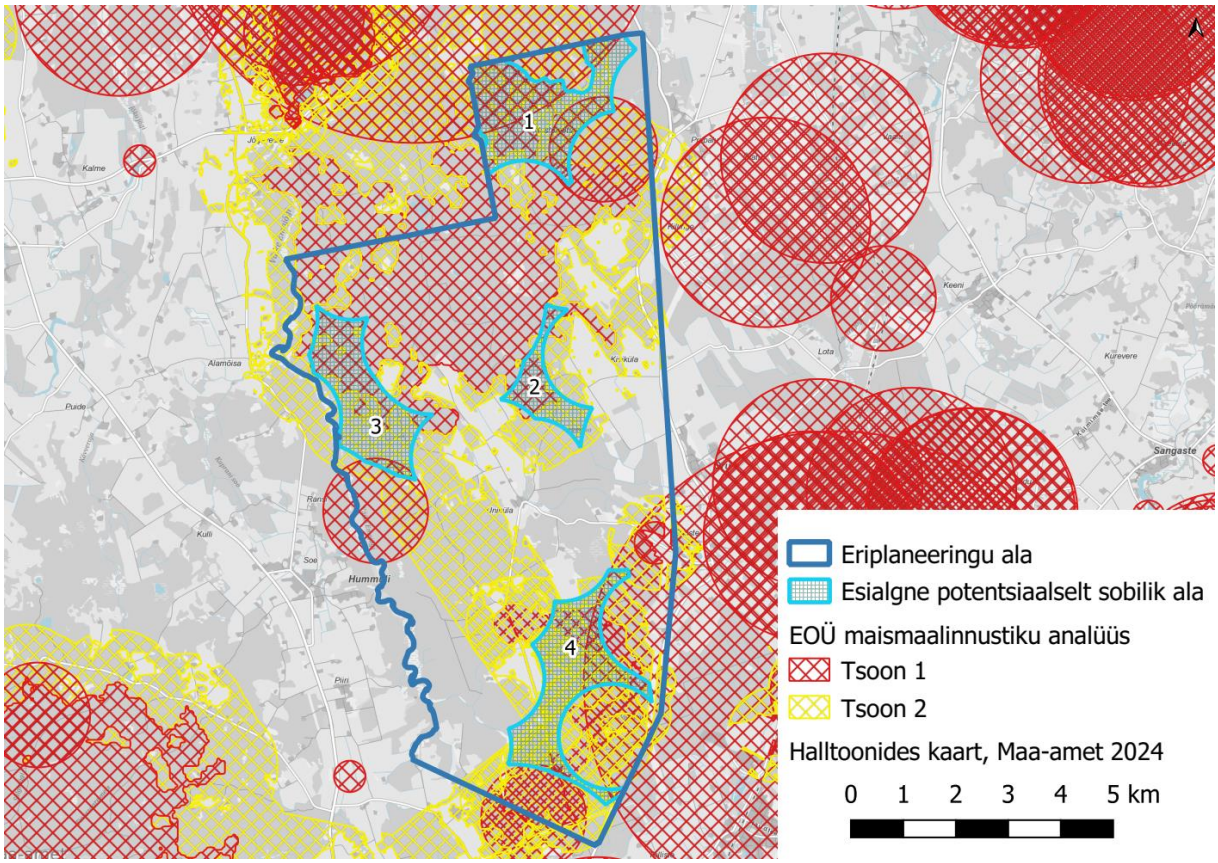

Figure 10. The overlap of zone 1 and zone 2 areas covered by the EOS terrestrial bird population analysis with potentially suitable wind farm areas.

2.4.7 Cross-border environment

The Latvian territory bordering Valga rural municipality is part of the North Vidzeme Biosphere Reserve. North Vidzeme Biosphere Reserve is the only biosphere reserve in Latvia. The area of the reserve covers 475,514 ha. The procedure for the protection of the biosphere reserve separately designates areas where wind turbines with a height of more than 30 m can be built. The part of the biosphere reserve at the border lying south of the designated spatial plan area is not designated as[16] a suitable area for wind turbines.

The objective of the biosphere reserve in national and international terms is to achieve a balance in the protection of natural diversity, the promotion of economic development and the preservation of cultural values. The biosphere reserve represents the internationally recognized terrestrial and Baltic coastal ecosystems of the temperate forest zone. In order to ensure the preservation of the territory's landscape, ecosystems, species and genetic diversity, as well as to promote sustainable economic development, the territory of the biosphere reserve is divided into functional zones (landscape

[1515] Views of the Ministry of Climate, letter 7-15/23/3709-2 of 21 September 2023.

[16] https://likumi.lv/doc.php?id=229252&from=off#piel2

protection zones and neutral zones).[17] The planning area is adjoined by the landscape protection zone of the biosphere reserve (Figure 11).

About 6.1 km from the designated spatial plan area to the territory of Latvia, there is a micro-reserve (species' protection site in the Estonian sense) 438, for the protection of which a microreserve buffer zone has been established. The border territory also includes areas of habitat types as set out in the Habitats Directive (Figure 11).

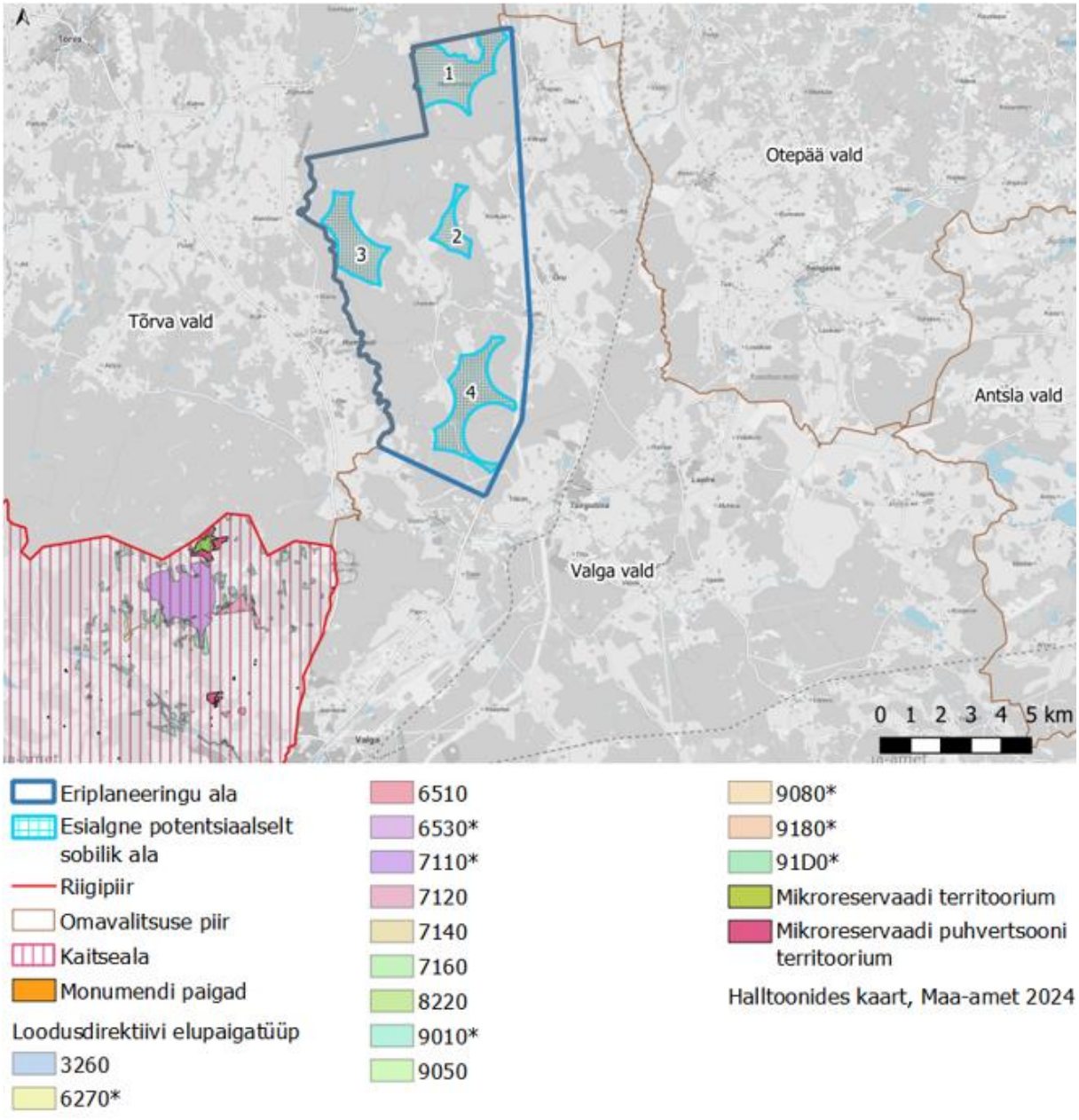

Figure 11. Known nature conservation restrictions on the territory of the Republic of Latvia south of the designated spatial plan area. Source: https://ozols.gov.lv/pub 11.03.2024.

Restrictions in the cross-border area are identified upon preparation of the designated spatial plan and its SEA.

[17] https://www.daba.gov.lv/en/north-vidzeme-biosphere-reserve

2.5 Identification of relevant impacts, ie the substantive scope of the impact assessment, including the SEA

The SEA programme carries out a preliminary **identification** of impacts and the determination of the scope and methodology of the assessment. Significant **impacts are assessed in the report concerning the location pre-selection stage of SEA.**

An overview of the impacts of a wind farm over their lifecycle are presented in Table 1

Table 1. Overview of impacts of wind farms.

Stage of activity	Description of the activity	Key impact fields
Construction stage	Removal of vegetation (including deforestation and earthworks) from areas of wind turbines, infrastructure (roads, power lines, etc), substations and assembly sites. Construction work (construction of foundations, construction of power lines and utility lines, on-site assembly of wind turbines, etc).	Direct removal of vegetation (including forest) and soil from construction sites, which can lead to damage to habitats. Construction noise associated with construction work which may disturb the surrounding biota (in particular the possibility of nesting disturbances for birds). The increasing burden on the road network associated with construction work, which may affect the condition of the roads. Damaging land improvement systems during construction work impacts the hydrological regime and through that land as the property of the landowner.
Exploitation stage	Production of electricity using wind turbines (operation of wind turbines, the presence of power lines).	Of the biota groups, birds and *Chiroptera* (bats) are primarily impacted. The impacts are expressed in disturbances, which may reduce the size of suitable habitat, the formation of a barrier effect and the risk of collision. For individuals, the significant impacts of operational with wind turbines are the formation of noise and shadow flicker, as well as visual changes in the landscape. Reducing emissions of greenhouse gases and other air pollutants due to an increase in the share of renewable energy.
Closing stage	At the planning stage, the closure of the wind farm is not foreseen and the closing time is not defined. The life span of wind turbines is 25–30 years, after which the wind turbines may be replaced with new ones or the park may be dismantled.	The SEA report also provides a comprehensive overview of the effects of the closing stage, in particular from a waste generation perspective. Considering the long life span of the wind turbines and the different scenarios that may follow (dismantlement, partial renewal, replacement with new ones), it is not possible to give accurate estimates of the impacts of the wind farm closure stage at the location selection stage.

2.5.1 Impact on Natura 2000 sites (Natura preliminary estimate)

Natura 2000 is a Europe-wide network of protected areas that aims to ensure the conservation of rare or endangered animals, including birds and plants, and their habitats, or, if necessary, to restore endangered species and habitats to a favourable status across Europe. The idea and content of the Natura 2000 network of areas are set out in the EU Habitats Directive (92/43/EEC), adopted in 1992. The same Directive also incorporated selected special protection areas under the Birds Directive (2009/147/EC), which entered into force in 1979, as part of the Natura network. Natura assessment is

an assessment of the expected impact of the implementation of a proposed activity on the Natura 2000 sites.

The Natura 2000 assessment is based on the guidance material 'Guidelines for carrying out Natura assessments in the implementation of Article 6(3) of the Habitats Directive in Estonia' [„Juhised Natura hindamise läbiviimiseks loodusdirektiivi artikli 6 lõike 3 rakendamisel Eestis"] prepared by the Estonian Association of Environmental Impact Assessors [Eesti Keskkonnamõju Hindajate Ühingu MTÜ] (Aunapuu, A., Kutsar, R., etc., 2019) and the document 'Managing Natura 2000 sites' prepared by the European Commission. Provisions of Article 6 of the Habitats Directive 92/43/EEC (Brussels, 21.11.2018; C(2018) 7621 final) and the European Commission's Guide 'Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC'.

The first stage of Natura assessment is the preliminary Natura assessment. This is a procedure for deciding whether the implementation of the proposed activity may adversely impact the maintenance of the integrity of the Natura site and the species and/or habitat types serving as the conservation objective. At the preliminary assessment stage, the likely impact of the project or plan on the Natura 2000 sites and its conservation objectives is estimated, including, where appropriate, synergies with other plans or projects, and it is assessed whether it can objectively be concluded that the site is likely to have an adverse impact on the site's conservation objectives or that an impact is not excluded. If the information provided during the preliminary assessment indicates that adverse impacts are likely or remain unclear, it is necessary to carry out the next stage of the Natura assessment – the appropriate Natura assessment.

The construction of wind farms is not directly necessary to achieve the conservation objectives of any special protection areas and special areas of conservation.

The designated spatial plan area overlaps with two Natura 2000 special areas of conservation: in the north with the Sauniku special area of conservation (EE0080408) and in the east with the Õru special area of conservation (EE0080428), which is also the Õru limited-conservation area (KLO2000105). To the northern and north-western direction of the designated spatial plan area are Kada järve special area of conservation (EE0080429) with about 2.9 km and the Soontaga-Sauniku special area of conservation (EE0080410) with about 1.9 km away. The Prange special area of conservation (EE0080407) is about 4.6 km to the northeast. To the west, the Otepää special protection area (EE0080401) and Otepää special area of conservation (EE0080401) are about 6.4 km away, the Mõneku special area of conservation (EE0080472) is about 2.9 km away, and Valli soo special area of conservation (EE0080427) is about 5.8 km away (Figure 12).

In the case of Natura sites, impact can generally be considered excluded within 100 m of the[18] special area of conservation. In the case of particularly sensitive wetlands, the potential impact area can be estimated at up to 250 m. **Sauniku special area of conservation**, which has been established for the conservation of the habitat type as specified in Annex I and the habitats of the species in Annex II to the Habitats Directive, falls within the potential area of impact of suitable areas of potentially suitable areas (100 m from the potentially suitable area 1). Habitat type to be protected: transition mires and quaking bogs (7140). Species whose habitats are protected: fen orchid (*Liparis loeselii*), marsh saxifrage (*Saxifraga hirculus*).

Since the site has been formed to protect the wetland habitat type and the plant species growing in excessively damp conditions, the potentially suitable area 1 impacting the Sauniku special area of conservation cannot be excluded. It is necessary to carry out an appropriate assessment.

[18] On the impact of onshore wind farms on biota and the recommendations of the Estonian Environmental Board on their planning in the comprehensive spatial plans of local governments (as of 10 November 2021)

According to the EOS terrestrial bird population analysis[19], the most sensitive species of wild bird is the black stork, for which the potential impact area (zone 3 area) can reach 14 kilometres. Thus, at the Natura preliminary assessment the Natura special protection areas within 14 km of potential wind farm areas are being considered.

The nearest Natura special protection area, the Otepää special protection area (EE0080401), is about 6.8 km from the nearest potentially suitable wind farm area (Figure 12). The Otepää special protection area has been established for the conservation of the bird species specified in Annex I to the Birds Directive and the habitats of migratory bird species not included in Annex I. Species whose habitats are protected: Eurasian goshawk (*Accipiter gentilis*), Eurasian wigeon (*Anas penelope*), mallard (*Anas platyrhynchos*), lesser spotted eagle (*Aquila pomarina*), grey heron (*Ardea cinerea*), hazel grouse (*Bonasa bonasia*), little ringed plover (*Charadrius dubius*), black stork (*Ciconia nigra*), western marsh harrier (*Circus aeruginosus*), red-breasted flycatcher (*Ficedula parva*), Eurasian pygmy owl (*Glaucidium passerinum*), red-backed shrike (*Lanius collurio*), European honey buzzard (*Pernis apivorus*), European green woodpecker (*Picus viridis*).

According to the EOS terrestrial bird population analysis, there is no zone 1, 2 or 3 area associated with the finding site or staging post of any species within the special protection area that extends to potentially suitable wind farm areas. **An impact on the Otepää special protection area is therefore excluded. There are no finding sites of species that serve a conservation objective in the area where important feeding areas or corridors would be connected to potential wind farm areas.**

The potential wind farm area's impact area also include the Lake Võrtsjärv special protection area (EE0080571), which is located 7.3 km from the nearest potentially suitable area. Species whose habitats are protected: great reed warbler (*Acrocephalus arundinaceus*), northern pintail (*Anas acuta*), Eurasian wigeon (*Anas penelope*), mallard (*Anas platyrhynchos*), garganey (*Anas querquedula*), greater white-fronted goose (*Anser albifrons*), taiga bean goose (*Anser fabalis*), common pochard (*Aythya ferina*), tufted duck (*Aythya fuligula*), Eurasian bittern (*Botaurus stellaris*), common goldeneye (*Bucephala clangula*), black tern (*Chlidonias niger*), black stork (*Ciconia nigra*), western marsh harrier (*Circus aeruginosus*), corn crake (*Crex crex*), Bewick's Swan (*Cygnus columbianus bewickii*), Eurasian coot (*Fulica atra*), white-tailed eagle (*Haliaeetus albicilla*), lesser black-backed gull (*Larus fuscus*), black-headed gull (*Larus ridibundus*), bluethroat (*Luscinia svecica*), smew (*Mergus albellus*), goosander (*Mergus merganser*), osprey (*Pandion haliaetus*), ruff (*Philomachus pugnax*), great crested grebe (*Podiceps cristatus*), little crake (*Porzana parva*), spotted crake (*Porzana porzana*), common tern (*Sterna hirundo*), wood sandpiper (*Tringa glareola*), northern lapwing (*Vanellus vanellus*).

According to the EOS terrestrial bird population analysis, zone 3 of the area associated with the staging post of the greater white-fronted goose, which originates in Lake Võrtsjärv, which falls under the conservation objective of the area, overlaps with the potentially suitable area 1. **Impact on the conservation objectives of the Lake Võrtsjärv special protection area is therefore not excluded**. **It is necessary to carry out an appropriate assessment.**

[19] https://kliimaministeerium.ee/elurikkus-keskkonnakaitse/looduskaitse/uuringud-projektid-ja-analuusid#analuus-ja-lisad

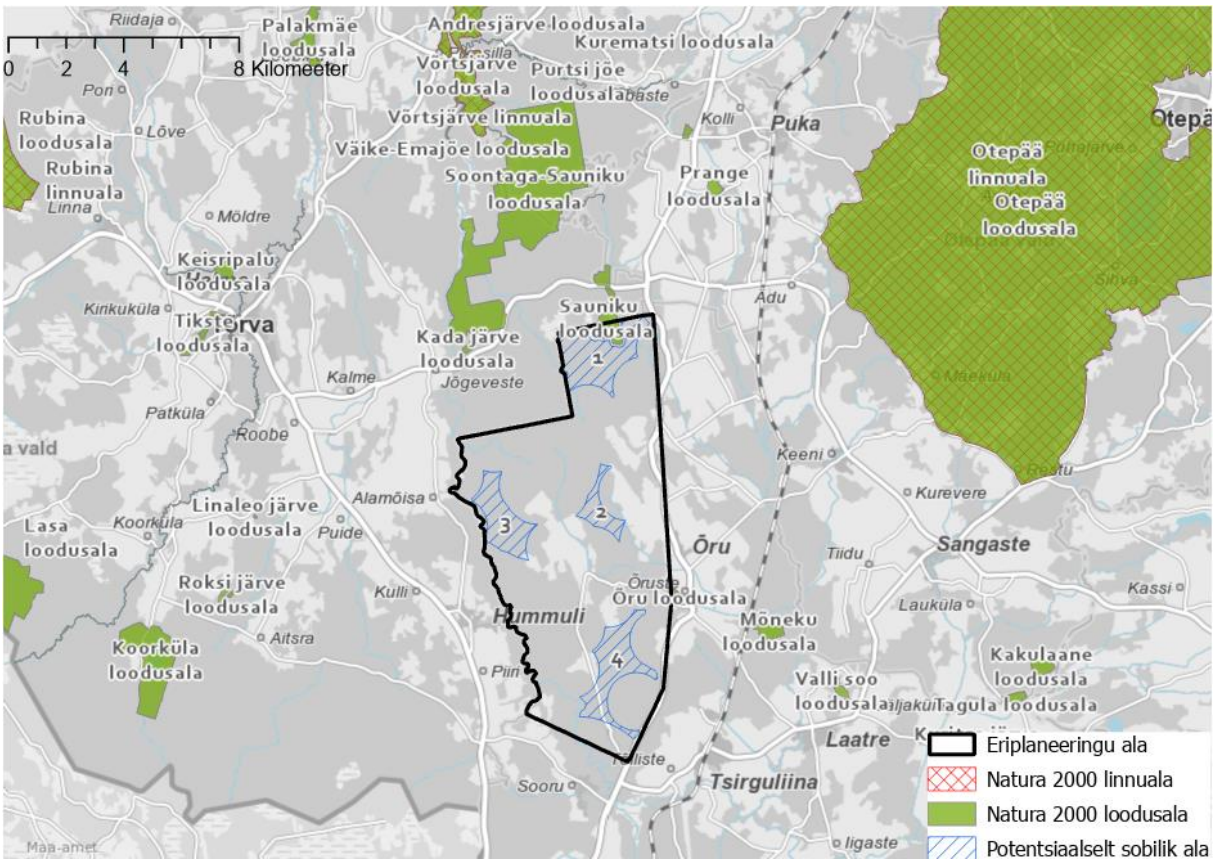

Figure 12. Location of designated spatial plan areas and potentially suitable wind farm areas in relation to Natura sites. Basis: EELIS (Estonian Nature Information System), Estonian Environment Agency, 10 January 2024.

Based on the nature of the designated spatial plan, the area where wind farms, including the necessary electricity connection lines, can be planned may be specified at the location selection stage. If there is doubt about the potential impact on a Natura site during the preparation of the SEA stage I report, the preliminary Natura assessment will be repeated in the framework of the SEA of the I stage of the designated spatial plan and the need for an appropriate Natura impact assessment will be assessed. If necessary, an appropriate assessment is carried out within the framework of the SEA.

2.5.2 Impact on biodiversity and populations, flora and fauna

2.5.2.1 Impact on flora

In the case of wind farms, **the impact on flora** may occur **during the construction stage** through direct removal of vegetation from the areas under construction and damage to vegetation associated with construction activities (trampling with machinery in the immediate vicinity of construction areas). Flora is also impacted by possible changes in the hydrological regime associated with construction work (eg when establishing drainage systems).

The extent of the direct impact area is limited to the surface under construction and its immediate surroundings. Deforestation and earthworks are carried out from and around the area of the wind turbine foundation used by construction equipment, from the areas under the new connection routes, within the protection zone of the connecting line to the substation and from the areas of underground cables inside the wind farm. Deforestation is carried out if the above-mentioned areas overlap with forest land. It is not necessary to carry out deforestation along the entire length of the blade of the wind turbine, since the range of the blade is higher than the height of the forest.

More indirectly, construction works can have an impact on plant communities through a change in hydrological regime or lighting conditions in the vicinity of construction areas. The extent of indirect impact depends on the type of community and the nature of the construction work. Page 9 of Annex 1 to the Minister of Rural Affairs Regulation No 45 'Design Standards for Land Improvement Systems' [„Maaparandussüsteemi projekteerimisnormid"] of 6 May 2019 sets out the distances between the ditches to be designed, taking into account the types of forest growth sites. According to the annex, the draining effect on mineral soils is generally 60 to 100 metres. Inthe case of sensitive communities (such as fens or habitats of species sensitive to hydrological regime), the impact of a change in hydrological regime can occur at a distance of several hundred meters. As a rule, the construction of wind farms is not accompanied by large-scale drainage activities, but construction activities (eg construction of roads) may be accompanied by activities that change the hydrological regime of the soil.

No significant impacts deriving from exploitation of the wind farm on vegetation have been identified so far and are therefore not assessed in the SEA report.

The impact on flora might be significant in particular where the activity concerns finding sites of protected plant species or high-value plant communities, such as key forest habitats or habitats with high representativity set out in the Habitats Directive.

To assess the impact on flora:

- Existing data in databases (in particular EELIS) on key forest habitats, habitat types as specified in the Habitats Directive and finding sites of protected plant species are being assembled. The up-to-dateness and relevance of the data is analysed and recommendations for location selection based on the available data are made.
- In the case of the northern part of potentially suitable area 1 and 3 (the so-called parts overlapping the national survey area), the following studies are relied on for further input (no additional studies on flora are foreseen for these areas):
    - Estonian Fund for Nature. 2023. Study of swamp habitats and plant species in possible development areas of wind energy. Lot 3 of the public procurement *Taimestiku uuring tuuleenergeetika eelisarendusalade leidmiseks Keskkonnaagentuurile*.
    - Estonian Seminatural Community Conservation Association. 2023. Study of flora to find priority wind energy development areas for the Estonian Environment Agency (meadow habitats as specified in the Habitats Directive). FINAL REPORT.
    - Consultare OÜ. 2023. Inventory of the Habitats Directive's forest habitats in the Valga-Tõrva survey area under lot 14 of the public procurement "Loodusdirektiivi metsaelupaikade inventuur tuuleenergeetika eelisarendusalade leidmiseks (Keskkonnaagentuur)" ['Inventory of forest habitats of the Habitats Directive for finding priority development areas for wind energy (Estonian Environment Agency)'].
- In areas that do not overlap with the state survey areas, a study of flora is carried out in parallel with the preparation of the spatial plan. The study will be carried out on the potential locations of wind turbines and possible locations of access roads/sites, ie in the area potentially impacted by the construction activity and areas within a radius of 50 m from it. In the course of the flora study, the finding sites of protected vascular plant, mushroom and moss species are mapped. Upon finding a protected species, the number of the species in the area is determined and the finding site is mapped. In addition, communities of high ecological value are mapped in the area – areas potentially corresponding to the characteristics of key forest habitats and communities with a higher representativity (A and B) corresponding to habitat types under the Habitats Directive.

2.5.2.2 Impact on fauna, including birds

In the case of wind farms, **bats and birds** (primarily birds of prey and water birds with a large body mass, as well as wild Galliformes) are a significantly impacted groups of fauna. They may be impacted both during the construction stage (possible disturbance from construction activities and possible loss of habitat) and during the exploitation stage (risk of death due to collisions, migration obstacle, habitat abandonment, noise impact for some species and loss of habitat coherence).

In order to assess the impact on the bird population, an interested party[20] has commissioned a basic research on birds with a level of accuracy suitable for the preparation of a detailed solution for the wind farm, with the research covering the potentially suitable areas of the designated spatial plan area and an area 500 m from them. The fieldwork for the study has mostly been carried out in 2023, but the final report of the study has not yet been completed by the time of the preparation of this SEA programme. In the course of the study, the following works were carried out/will be carried out:

1. Existing data on wild birds are aggregated from the following sources of information:
    - EELIS (Estonian Nature Information System), Estonian Environment Agency and PlutoF;
    - Birdlife Estonia (Estonian Ornithological Society), Kotkaklubi. 2022. Nationwide analysis of terrestrial bird population [Üle-eestiline maismaalinnustiku analüüs]. Public procurement No. 239156. Map layers from the Spatial Data Service of the Estonian Environment Agency. – Also referred to as *EOS analysis* in future work.
    - Kotkaklubi. 2022. Acquisition of information on eagles and black storks equipped with satellite and GSM-based transmitters and analysis of nesting information and support feeding of black storks.
2. Point observations of birds were carried out according to the methodology of the terrestrial bird population analysis in chapter 5.1.1.

Focus species: all species are recorded, but priority is given to protected and conservationally important species, especially Accipitriformes, Falconiformes, black stork, common crane, Anseriformes, etc. In the study area, observation sites were selected in such a way that more than half of the study area was covered, preferably at least 75 to 80%.

In the spring (March to May), summer (June to August) and autumn (September to November), censuses were held from the specified census point(s). The minimum number of census hours from each observation point was 36 hours in spring and autumn and 18 hours in summer. The length of one observation cycle (one count from one observation point) is 2–3 hours.

In point observations, the bird species, the number (for groups, flocks), the flight altitude (using laser binoculars or estimating the flight altitude using objects of known height), the time (seconds) spent by the bird in the study area and preferably the flight path were recorded as a sketch on a field work card or smart device. Point observations provide a quantitative estimate of the frequency the birds use the site's airspace and input into species-specific mortality rate estimate models, if decided to be used.

3. Mapping of nesting territories of protected bird species

[20] The study is conducted by Looduseekspert OÜ, the works are led by Ants Tull (PhD, zoology and hydrobiology).

The inventory methodology was based on the guidelines[21] prepared in 2013. Within the framework of the work the following activities were performed: mapping the nesting territories of protected bird species, including an inventory of wild Galliformes (primarily Eurasian capercaillie), the search for large twig nests, search for Eurasian goshawk nests and inspection of known Eurasian goshawk nests, luring of owls, woodpeckers, hazel grouses and other protected bird species and the resulting mapping of nesting territories.

The potentially suitable area 1 and the northern part of area 3 overlap with the so-called state survey area. The results of the study (expected to be completed in June 2024) carried out by Loodustaju OÜ at the request of the Estonian Environment Agency will also be used as a source of information in preparing the SEA.

On the basis of the studies described above, the suitability of potentially suitable areas for the construction of a wind farm is assessed with attention paid to birds, recommendations are given for choosing the location of the wind farm and the choice of the location of wind turbines, as well as for mitigation measures, including the need for monitoring.

In order to assess the impact on the bat population, an interested party[22] has commissioned a basic research on bats with a level of accuracy suitable for the preparation of a detailed solution for the wind farm, with the research covering the potentially suitable areas of the designated spatial plan area and an area 500 m from them. The fieldwork for the study has mostly been carried out in 2023, but the final report of the study has not yet been completed by the time of the preparation of this SEA programme. In the course of the study, the following works were carried out/will be carried out:

1. Existing data on bats are aggregated from the following sources of information:
    - EELIS (Estonian Nature Information System), Estonian Environment Agency;
2. A study of bats is carried out:
    - The assessment of the impacts on bats is based, among other things, on the EUROBATS guide 'Guidelines for consideration of bats in wind farm projects'. The task of the bat study was to ascertain whether the area contains important gathering spots, feeding grounds, and summer colonies and shelters for bats. The activity of bats in the spring, summer and autumn period also had to be ascertained.
    - Bats were recorded from sunset to sunrise, observations were carried out on nights with favourable weather conditions for bats – air temperature >10°C, windless and without precipitation. The methodology of the study of selected bats and the census points selected in the wind range make it possible to assess the species composition and abundance of bats in the study area. At the same time, attention is paid to the fact that the blades of wind turbines are above the treetops, which is taken into account when choosing the study methodology.

      In the areas of the bat study, the Wildlife Acoustics Song Meter Mini Bat automatic detector was used. The data is processed in the Wildlife Acoustics Kaleidoscope Pro 5 Analysis Software. In spring and early summer, detectors were installed on trees at a height of 1.8–2.0 m, but in August detectors were installed at a height of 10–20 m in the canopy of trees to monitor the migration over the canopy.

[21] Nellis. R. 2013. Proposal for monitoring bird populations in the Natura 2000 network of protected sites and a monitoring plan for 2013-24. [Natura 2000 kaitsealade võrgustikku kuuluvate linnualade linnustiku seire ettepanek ja seirekava aastateks 2013-24].

[22] The study is conducted by Looduseekspert OÜ, the works are led by Ants Tull (PhD, zoology and hydrobiology).

Initial positions for pre-selection of a location for the municipal designated special plan of wind farms of Valga rural municipality, and impact assessment, including the strategic environmental assessment programme *Version: 09.04.2024*

3. Based on the results of the fieldwork, areas where there are good habitats-feeding areas for bats, where the abundance of bats is high and where either the construction of wind turbines must be avoided or mitigation measures should be applied, will be mapped in the wind area.

The potentially suitable area 1 and the northern part of area 3 overlap with the so-called state survey area. The results of the study (expected to be completed in April 2024) carried out by Elustik OÜ at the request of the Estonian Environment Agency will also be used as a source of information in preparing the SEA.

On the basis of the studies described above, the suitability of potentially suitable areas for the construction of a wind farm is assessed with attention paid to bats, recommendations are given for choosing the location of the wind farm and the choice of the location of wind turbines, as well as for mitigation measures, including the need for monitoring.

The report concerning the location pre-selection stage of SEA also provides an overview of the possible impact of wind turbines **on wild and domestic animals** (mammals) based on literary sources.

2.5.3 Impact on the green network

Potentially suitable wind farm areas largely overlap with the area of the green network according to county-wide spatial plans and comprehensive spatial plans. Overlap occurs with both support areas and corridors (Figure 13).

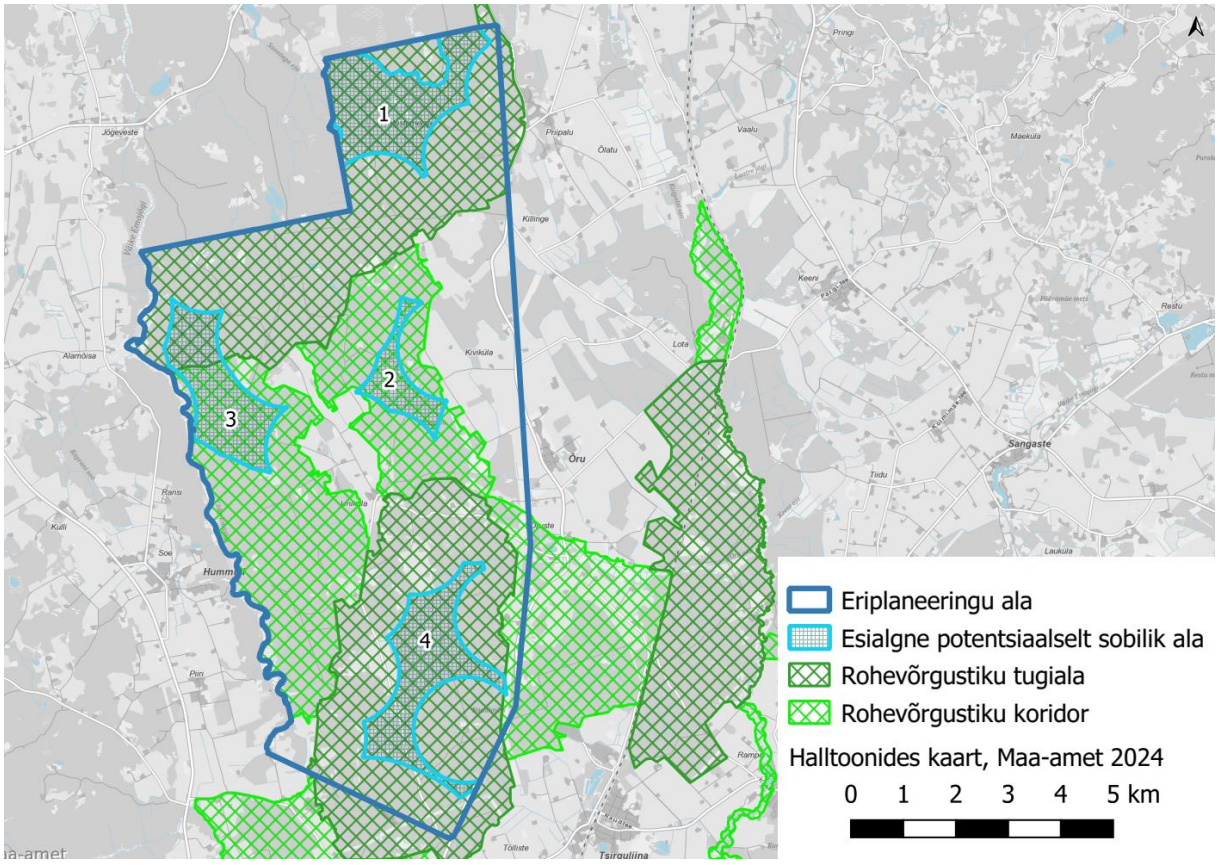

Figure 13. Overlapping of potentially suitable wind farm areas with the area of the green network according to Valga rural municipality's comprehensive spatial plan.

The impact on the green network will be assessed and measures to mitigate the impacts will be discussed in the report concerning the location pre-selection stage of SEA. The assessment is carried out in the form of an expert assessment and the assessment of the coherence of the green network is

carried out, among other things, by using the ecosystem coherence assessments completed within the framework of the ELME project (www.keskkonnaagentuur.ee/elme). The assessment will also take into account the[23] Green Network planning guide. It also assesses the compliance of the activity with the green network conditions under the county-wide spatial plan and comprehensive spatial plan.

2.5.4 Impact on protected areas

Protection areas (protected areas, limited-conservation areas, species' protection sites) are excluded under the conservation regulations or the Nature Conservation Act as locations of wind turbines and related infrastructure elements. Given the information provided in chapter 2.4.6.1 and the location (in particular the distance) of potentially suitable wind farm areas in relation to protection areas, the impact on most protected areas, limited-conservation areas and species' protection sites, the conservation objective of which does not entail birds, is excluded.

In the case of areas formed for the protection of vegetation, impact can generally be considered to be excluded at a distance of 100 m from the[24] area. In the case of particularly sensitive wetlands, the potential impact area can be estimated at up to 250 m. Out of species' protection sites, an impact on the **Sauniku species' protection site of orchids**, which is within 100 m of a potentially suitable area 1, cannot be ruled out. The species' protection site is formed to protect plant species growing in wetlands, and upon preparation of the SEA the possible impact of the construction of a wind farm on hydrological regime which may impact the habitat is assessed.

According to the EOS terrestrial bird population analysis[25], the most sensitive species of wild bird is the black stork, for which the potential impact area (zone 3 area) can reach 14 kilometres. In the case of the lesser spotted eagle, the potential impact area is 3.5 km from the nest, for the osprey 9 km and for the Eurasian capercaillie 1 km from the habitat, as well as connecting corridors between habitats.

In view of the above, out of the species' protection sites, impact on the **Rampe species' protection site of the black stork, Mõneku species' protection site of the black stork and the conservation objectives of the Soontaga Nature Reserve** cannot be excluded. Both black stork species' protection sites and the protected area fall within the potential impact area of possible wind farm areas (up to 14 km according to the EOS analysis). Also, **the Supa species' protection site of the lesser spotted eagle** is within the impact area of the potentially suitable area 4. In the course of the SEA, the suitability of potentially suitable areas as a feeding area for the black stork, osprey and lesser spotted eagle is assessed based on the results of bird studies (see chapter 2.5.2.2).

Out of species' protection sites, **Virna species' protection site of Eurasian capercaillie,** which lies between three potentially suitable areas, may also be impacted. There may be an impact on the cohesion between the habitats of the species which is the conservation objective of the species protection site. The SEA assesses the impact of the construction of a wind farm on potentially suitable areas on the species protection site of the Eurasian capercaillie and on the cohesion between habitats based on the results of bird studies (see chapter 2.5.2.2).

2.5.5 Impact on water quality and hydrological regime

Watercourses remain in potentially suitable wind farm areas considered in the designated spatial plan (see chapter 2.4.2). The construction of wind farms can potentially have an impact on water bodies

[23] Estonian Environment Agency; Hendrikson & Ko. 2018. Rohevõrgustiku planeerimisjuhend [Green Network Planning Guide]. Available at: https://www.keskkonnaagentuur.ee/sites/default/files/rohev6rgustiku-planeerimisjuhend_20-04-18.pdf

[24] On the impact of onshore wind farms on biota and the recommendations of the Estonian Environmental Board on their planning in the comprehensive spatial plans of local governments (as of 10 November 2021)

[25] https://kliimaministeerium.ee/elurikkus-keskkonnakaitse/looduskaitse/uuringud-projektid-ja-analuusid#analuus-ja-lisad

during the construction stage if construction works are planned for water bodies or their bank areas. During the exploitation stage of the wind farm, the potential impact on water bodies may occur in the form of an emergency (eg oil leaks). In order to protect water bodies, they are subject to building exclusion zones under the Nature Conservation Act, upon adherence to which it **is unlikely that there will be a significant impact on water bodies.** If the preparation of the designated spatial plan reveals the need to reduce building exclusion zones, the impact assessment will address the potential impact on water bodies and, if necessary, mitigating measures.

Several of the watercourses in Valga rural municipality serve as artificial recipients of land improvement systems. When constructing wind farms, it is possible to impact the hydrological regime of water bodies by damaging land improvement systems. Based on the above, there may be a significant impact on water bodies, as several watercourses are connected to land improvement systems. **Upon building on drained land, it is important to ensure the sustainable functioning of land improvement systems in order to avoid flooding. The topic is discussed in the SEA report** in the form of an expert assessment.

The report concerning the location pre-selection stage of SEA provides an overview of the water bodies in the areas and the related restrictions that must be taken into account in further planning.

The area of the designated spatial plan remains mainly in a relatively protected area with protected groundwater. In the case of wind farms, groundwater may be impacted mainly during the construction stage (laying of foundations) or during the exploitation stage in the event of emergencies (eg oil leaks). **The potential occurrence of emergency situations and their possible impact are addressed in the course of the SEA. The potential impact on groundwater during construction will also be addressed.** The assessment is carried out in the form of an expert assessment based on the degree of accuracy of the location's pre-selection stage.

2.5.6 Impact on soil, including valuable agricultural land

The proposed activity is accompanied at the construction stage by the removal and relocation of soil from the areas under construction. Thus, the soil is being impacted. The volume of earthworks required for the construction of the wind farm depends on the detailed solution of the wind farm (number of wind turbines, location of assembly sites, infrastructure, etc), as well as on the geological conditions of the site, primarily the characteristics of the surface coating. The exact nature and extent of the impact will be ascertained during the SEA. The assessment is carried out in the form of an expert assessment.

The impact on soil can be considered significant in particular if **valuable agricultural land** is impacted. Of the potentially suitable areas, there is little overlap in areas 2 and 3 with valuable agricultural land (Figure 7). In the case of wind farms, both agricultural use and energy production are possible together during the exploitation stage, but at the expense of the area under construction, the area of potentially valuable agricultural land is reduced and fragmented. In this case, the overlap with valuable agricultural land is scarce and a significant impact on agricultural land as a resource is not expected.

2.5.7 Visual impact, including impact on valuable landscape

When assessing the visual impact of the wind farm, the recommendations in the guidance material[26] prepared by AB Artes Terrae OÜ in 2020 are taken into account to the extent that they are transferable to onshore wind farms.

[26] AB Artes Terrae OÜ. 2020. Guidance material on methodological recommendations for visual impact assessment to promote the development of offshore wind farms. https://www.fin.ee/media/2706/download

To assess the visibility of the wind farm, special software WindPRO 4.0 is used. The Land Board's Digital Terrain Model and the Digital Surface Model are used as relief datasets. With this approach, it is possible to obtain an indicative map of the visibility of the wind farm, ie to identify the areas from which the wind farm may be visible to a significant extent. The software also allows to calculate the vertical and horizontal viewing angle of the wind turbine's visibility, which allows to determine the significance of the change in view caused by the wind farm. Based on the visibility analysis, the significance of the change in view is assessed. Assessments are made based on the scale described in the article 'DVC as a Supplement to ZVI: Mapping Degree of Visible Change for Wind Farms', published by Tara, A in 2022. In turn, a change in view can be considered a significant and undesirable environmental impact if a significant change in view manifests itself in valuable landscapes, valuable views, views related to protected areas or views on/from cultural monuments.

Valuable landscapes and valuable views are determined on the basis of the Valga county-wide spatial plan and the Valga rural municipality's comprehensive spatial plan, which determine valuable landscapes and road sections with beautiful views. Input acquired from disclosure events is also considered for significant views.

On the basis of the visibility analysis, the authority who prepared the SEA selects up to 15 viewing points – places where there is public access to, where the wind farm can remain visible, and areas with valuable landscapes and/or beautiful road sections are preferred. When choosing viewing points, the input of the rural municipality government and the public regarding the desired viewing points is taken into account. Photomontages are compiled from the viewing points. Preference is given to viewing points within a radius of up to 15 km from the planned wind turbines, as farther away the wind farm may no longer be clearly distinguishable / dominant to the human eye. It is appropriate to compile photomontages for more distant viewing points if the point is very important (eg an important tourist attraction, a gazebo of a protected area, etc) and there is a significant change of view based on the visibility analysis.

2.5.8 Probable impact on human health, social needs and property

2.5.8.1 Noise

The construction of wind farms is accompanied by noise during construction, which is similar to the noise associated with normal construction activities. Noise during construction is assessed with an expert assessment.

In the framework of the SEA, the extent and impact of noise caused by the operation of the wind farm are assessed. The assessment is carried out by calculation (noise maps are compiled using special software WindPro, etc). The assessment of noise is based on the Atmospheric Air Protection Act and the Minister of the Environment Regulation No 71 'Normative Levels of Environmental Noise and the Methods of Noise Measurement, Determination, and Assessment' [„Välisõhus leviva müra normtasemed ja müratasemе mõõtmise, määramise ja hindamise meetodid"] of 16 December 2016 and Minister of the Environment Regulation No 32 'Requirements for Compilation of Plans with the Aim of Limiting Environmental Noise' [„Välisõhus leviva müra piiramise eesmärgil planeeringu koostamise kohta esitatavad nõuded"] of 3 October 2016. The calculation is based on the international standard ISO 9613-2: *Acoustics – Abatement of sound propagation outdoors, Part 2: General method of calculation*. The calculation is carried out under conditions conducive to the propagation of noise.

Under the Atmospheric Air Protection Act the normative levels of environmental noise are:

1) limit value of noise – the maximum permitted level of noise, the exceeding of which causes environmental nuisance and the exceeding of which requires enforcement of reduction measures;

2) target value of noise – the maximum permitted level of noise in new comprehensive spatial plan areas.

Residential areas are subject to a limit value of 60 dBA for industrial noise during the day and 45 dBA at night, with a target value of 50 dBA during the day and 40 dBA at night. According to good planning practices, when designing new wind turbines, the goal must be to ensure the strictest requirements, ie a target value for environmental noise which ensures good conditions in the nearest noise-sensitive areas. The target value for industrial noise in category II areas (residential buildings) is 50 dB during the day and 40 dB at night. **As wind turbines operate around the clock, compliance of the noise level with night-time, ie stricter requirements (40 dB), becomes decisive**.

Wind turbines, like many other sources of noise, cause low-frequency sounds. Low-frequency noise is subject to the normative levels set out in the Annex to Minister of Social Affairs Regulation No 42 'Normative levels of noise in living and recreation areas, residential buildings and buildings in joint use, and methods of measuring noise levels' of 4 March 2002. These are therefore not limit values in force on outside territory, but the normative levels in force inside buildings.

In Estonia, there are no national guidelines on how to calculate the distribution of low-frequency noise from wind turbines and compliance with the limit values in force in the premises. The SEA is based on the noise assessment guide[27] applied in Finland and uses the *Finnish Low Frequency Sound* setting of the WindPRO module Decibel[28] for the calculation of low-frequency noise. For this methodology, the noise propagation is calculated separately on each octave strip in the range of 20 to 200 Hz. Indoor noise levels are obtained by using soundproofing indicators for buildings at different frequencies.

2.5.8.2 Shadow flicker

Wind turbines as high-rise structures inevitably cause shadows in sunny weather. Two types of environmental impacts caused by the interaction of wind turbines and sunshine are known – moving shadows and periodic reflections. Moving shadows are caused by structural parts of the wind turbine. The moving shadows of the wind turbines are caused by the rotating blades of the wind turbine. As the blades of the wind turbine move, the shadow is also constantly moving. This can significantly disturb people in nearby residential buildings and motorists driving on highways in the mornings and evenings. Theoretically, shadows can reach several kilometres. In reality, however, the shadow flicker does not cause significant disturbance beyond the diameter of about 10 wind turbine rotors.

During the SEA, the extent and duration of the flicker is assessed using the special software WindPRO. When assessing the duration and extent of the flicker. The duration of the shadow flicker is calculated using two different approaches:

1) the worst situation (the assumption that there is direct sunshine from sunrise to sunset, and the wind turbines are constantly working, the relief of the ground is taken into account);
2) the actual situation (average meteorological data representing several years in terms[29] of the duration of sunshine, the distribution of winds dominating the area, information on the expected operating time of wind turbines and ground relief information are used);

As there are no recommended values or norms for shadow flicker in Estonia, the significance of the flicker is assessed on the basis of[30] the recommendations in force in other countries (Germany,

[27] https://julkaisut.valtioneuvosto.fi/bitstream/handle/10138/42937/OH_2_2014.pdf?sequence=2&isAllowed=y

[28] https://help.emd.dk/knowledgebase/content/windPRO4.0/Appendix_A_DECIBEL.pdf

[29] Estonian Weather Service. The duration of sunshine. https://www.ilmateenistus.ee/kliima/kliimanormid/paikesepaiste-kestus/

[30] http://help.emd.dk/knowledgebase/content/windPRO3.4/c6-UK_WindPRO3.4-Environment.pdf Chapter 6.8

Denmark, Sweden, etc.). **The objective is to ensure a flicker level in residential areas below 8 h/a, taking climate conditions into account, or below 30 h/a without taking climate conditions into account, which is expected to be free from significant adverse impact.** If a national standard regarding the duration of shadow flicker is adopted in Estonia, that standard will be adhered to.

2.5.8.3 Impact on human health

In the case of wind farms, the impact on human health is primarily related to the potential impact of noise, shadow flicker and vibrations resulting from the operation of wind turbines, the assessment of which was already foreseen by the SEA programme in the previous chapters. These are the impacts of the wind turbines during operation. The SEA report also addresses the occurrence, extent and health effects of low-frequency sound and vibration. It is based on the latest scientific literature and research conducted in existing wind farms.

2.5.8.4 Impact on social needs and property

The construction and operation of wind farms may have an impact **on the property** of individuals, including a certain impact on **land use, the real estate market, recreational opportunities**. However, the current use of the land as profit yielding land is generally not restricted by the construction of a wind farm. The impact on property may occur, for example, if during construction the existing land improvement systems are damaged, the damage to which also impacts the land as the property of the landowners through a change in the water hydrological regime. Rather, there may be an impact on areas outside the wind farm area. **The potential impact on the value of real estate is considered in the SEA report on the basis of data from specialized literature and studies conducted in existing wind farms.**

Another important aspect is the possible impact on roads (especially during the period of construction work). The transport of heavy wind turbine components can lead to a deterioration in the condition of the roads, and it is necessary to find suitable measures to mitigate or compensate for the impacts. A wind farm may also lead to the need to build additional roads. Also, the flow of traffic during the construction of the wind farm may have an impact on road safety. On a positive note, it is important for the wind farm to have an in order road network and this may also be accompanied by the repair of certain roads in the area. The aforementioned impact aspects are discussed in the SEA report in the form of an expert assessment.

Assessing the economic impact and determining financial compensation mechanisms is not directly the task of the SEA. However, the SEA report also provides a comprehensive overview of the possible **compensation mechanisms for the impacts, ie the opportunities for local benefits** [31] for the local community. The treatment of local benefits takes into account the existing legal regulation of local benefits.

2.5.9 Waste generation

The waste generated during the construction stage of wind farms and the organisation of their management is similar to the usual waste management during construction. If appropriate measures are implemented (correct collection and removal of waste, etc), waste generation is unlikely to have a significant impact on the environment.

Waste, such as various consumables, waste oils, etc, is also generated during the operation of the wind farm. Waste management must comply with the current waste-related legislation. Upon the legitimate management of waste, a significant environmental impact is not expected to arise from it.

[31] Compensation or benefits from developments received by the local government or local community.

The largest generation of waste is caused by the wind farm dismantlement stage. The SEA report provides an overview of the waste amount and treatment methods.

2.5.10 Potential impact on cultural heritage

Cultural monuments and areas of protected zones of cultural monuments are likely to remain in an area that is unsuitable for the wind farm area according to the initial map analysis. There is also no overlap with archaeologically sensitive areas. A direct adverse impact is therefore not expected and will not be assessed.

Wind turbines can indirectly impact the views from and at architectural monuments. The assessment of the visual impact therefore also takes into account the location of cultural monuments and explains whether there may be a significant change in views from or at the architectural monuments. The principles of visual impact assessment are described in chapter2.5.7.

2.5.11 Potential impact on climate change

Building wind farms to generate electricity means increasing the share of electricity generation based on renewable energy sources, which creates the prerequisites for reducing greenhouse gases emitted by burning fossil fuels, **thereby having a potential positive impact on tackling climate change.** At the same time, the activity involves the deforestation of forest land and the removal of carbon-sequestering soil. Deforestation of forest land, and in particular the removal of peat soils and changes in hydrological regimes, cause irreversible changes in the environment and **this has an impact on carbon storage and sequestration. The SEA involves assessing the impact of activities on climate change.** The impact assessment is based on the World Bank's guide 'EIB Project Carbon Footprint Methodologies: Methodologies for the assessment of project greenhouse gas emissions and emission variations' and identifies the estimated greenhouse gas emissions in CO_2 equivalent associated with the construction and operation of the wind farm. The change in CO_2 sequestration associated with land-use change and the CO_2 equivalent emission reductions from renewable energy production will be taken into account.

According to special literature and the Climate Change Adaptation Development Plan, the potential impact of climate change (in the condition of increasing storms, strengthening winds and icing days) on wind farms and related infrastructure will also be addressed.

2.5.12 Other impacts

Upon preparing the SEA report**, the impact on infrastructure, including the road network, and the possible impact on national defence objects** (radars, national defence buildings) is assessed.

The assessment of the impact on national defence objects is based on the respective assessment of the Ministry of Defence (and subordinate agencies). The SEA programme has been prepared based on the knowledge that on 29 April 2021 a resolution has been made at Government cabinet meeting to make investments to improve air surveillance capabilities in order to alleviate national defence height restrictions for the construction of wind farms in a large part of mainland Estonia.

Wind turbines are associated with mobile, radio and television signal interference. The SEA report on the location selection stage provides a bibliography-based overview of the possibility of these impacts occurring. **Preparation of the designated spatial plan involves cooperation communication network operators.**

The SEA report addresses **the possibility and consequences of the occurrence of emergencies** and describes measures that can mitigate/avoid negative environmental impacts. The impact on road safety will also be addressed. The impact is assessed in the form of an expert assessment based on the special literature.

2.5.13 The probability of cumulative impact, taking into account other development projects in the surrounding area

A compound impact, or cumulative impact, is the cumulative effect of individual impact factors, eg the simultaneous implementation of different plans and projects. The cumulativity of impacts are integrated into the assessment of each topic covered in the above chapters as part of the standard environmental impact assessment.

There are no existing wind farms in the potential impact area of the Valga municipal designated spatial plan area. No additional wind farms are planned under the comprehensive spatial plan of Valga rural municipality. In the course of this SEA, significant cumulative impacts are expected to occur if wind farms are closer than 15 km to each other. The radius of impact is based on the fact that, based on the current practice of impact assessment of wind farms, the largest impact is the visual impact. Under normal conditions, wind farms do not significantly dominate the view at a distance of more than 10 km. At the same time, in the cumulative effect of several wind farms and in the case of open landscapes, a significant impact even at a greater distance cannot be ruled out. Thus, in this assessment, the cumulative impact is viewed conservatively, provided the wind farms are within 15 km of each other.

Within a radius of 15 km from potential wind farm areas, other wind farms may be planned under the Tõrva rural municipality's designated spatial plan for wind farms. In preparing the designated spatial plan, cooperation is carried out with Tõrva rural municipality and, if the pre-selection areas of the location of the wind farms of Tõrva rural municipality are ascertained and they are closer than 15 km from the potentially suitable areas of the Valga rural municipality's designated spatial plan. Cumulative impacts are assessed for each field of impact being assessed, if this proves appropriate, ie when cumulative impacts can be expected.

2.5.14 Probability of transboundary environmental impact

The planning area is adjacent to the state border between the Republic of Estonia and the Republic of Latvia. **Of the potentially suitable wind farm areas, the nearest one is 4.8 km from the territory of the Republic of Latvia. Thus, it is likely that the natural environment (in particular, impact on wild birds is possible) and the population (possible visual impact) within the territory of the Republic of Latvia will also be impacted.**

As far as we know, there is a requirement in force on the territory of Latvia that wind turbines with a capacity of more than 2 MW must be at least 800 m away from residential and public buildings. In the case of this spatial plan, the requirement is complied with.

The strategic environmental impact assessment in a transboundary context of spatial plans is based on the procedure set out in the Environmental Impact Assessment and Environmental Management System Act and the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention). The Republic of Latvia will get involved through the Ministry of Climate. Possible transboundary restrictions (finding sites of sensitive species, location of residential areas and the resulting restrictions) will be ascertained in the framework of the environmental impact assessment in a transboundary context.

The Republic of Latvia has been informed of the preparation of the spatial plan and its SEA by the Ministry of Climate on 18 December 2023 (7-15/23/5978).

A summary of DSP initial positions and the SEA programme and the DSP and SEA reports (including highlighting important environmental circumstances, impacts, mitigation measures, etc) will be translated into English and submitted to the Republic of Latvia for examination.

3 Parties to the designated spatial plan and impact assessment expert group

The parties involved in preparing the designated spatial plan carrying out the impact assessment are as follows:

- the authority who initiated the designated spatial plan and the SEA and brought them into effect is the Valga Rural Municipality Council (Valga county, Valga, Kesk 11, 68203; email kantselei@volikogu.valga.ee) and the authority who created and arranged the creation of the designated spatial plan is the Valga Rural Municipality Government (Valga county, Valga, Puietee 8, 68203; email valga@valga.ee; contact person Lenna Hingla);
- the person interested in the designated spatial plan is Sunly Wind OÜ (Harju maakond, Tallinn, Põhja-Tallinna linnaosa, Telliskivi tn 60/5, 10412; email: info@herrotuulepark.ee; phone: 5197 2700; Contact person: Sander Lõuk);
- the consultant for the preparation of the designated spatial plan is AB Artes Terrae OÜ (Tartu county, Tartu, Küütri tn 14, 51007; email: heiki@artes.ee ; phone: 509 1874; Contact person: Heiki Kalberg);
- the entity who prepared the SEA is LEMMA OÜ (Harju county, Tallinn, Kristiine, Värvi 5-A402, 10621; email: piret@lemma.ee; phone: 505 9914; Contact person: Piret Toonpere).

Pursuant to clause 8 of subsection 2 of § 36 of the Environmental Impact Assessment and Environmental Management System Act, the SEA programme must include the composition of the export group, indicating and providing reasoning for which fields and which impact is assessed by each member of the expert group.

Table 2. Composition of the impact assessment expert group.

Field	Expert	Competence
SEA leading expert Working group work coordination, socio-economic impacts; assessment of the specific effects of wind turbines; shadow flicker, noise. Also the remaining fields of impact not covered by other experts.	Piret Toonpere	Bachelor of Science in Environmental Technology specialising in Ecosystem Technology and Master of Science in Environmental Management and Cleaner Production In accordance with subsection 4 of § 34 of the Environmental Impact Assessment and Environmental Management System Act, the leading expert has the right to lead the SEA. Strategic assessment of the environmental impact of the detailed spatial plan of the Selja wind farm in the city of Paldiski. Strategic assessment of the environmental impact of the first stage of the Pärnu-Tori designated spatial plan, ie the so-called Põlendmaa wind farm designated spatial plan
Aggregation of environmental description, mineral deposits, impacts on the natural environment, issues related to hydrogeological conditions and cartography.	Heli Aun	Master of Technical Science in Geotechnology. Strategic assessment of the environmental impact of the first stage of the Pärnu-Tori designated spatial plan, ie the so-called Põlendmaa wind farm designated spatial plan Environmental impact assessment of the planned monitoring positions along the Narva River.

Field	Expert	Competence
Impact on climate change	Liis Promvalds	Master's degree in Environmental Management and Policy Carbon footprint, climate proofing and sustainability assessments
Impacts on the natural environment, including the green network and protected areas; WindPro modellings	Laura Elina Tuovinen	Master of Engineering in Geodesy, Real Estate and Land Management, Bachelor of Arts in Landscaping Completed WindPro software manufacturer training in 2022
Impact on soil, hydrological regime and aquatic environment	Mihkel Vaarik	Certified Water Management Engineer Strategic assessment of the environmental impact of the detailed spatial plan of the Selja wind farm in the city of Paldiski (impacts on the hydrological regime)
Impact on wild birds, impact on bats	Ants Tull (Looduseksperт OÜ)	Doctor of Zoology and Hydrobiology Birds: Expert assessment of the lesser spotted eagle species protection site (KLO9124798) in connection with the Kärevere bypass at State Road 2 (E263) Tallinn-Tartu-Võru-Luhamaa between km 162.6 and 167.3, the Kardla-Tartu section between km 170.5 and 178.7 and the northern bypass of Tartu Bird study at property of Vändra metskonna 106 (cadastral unit: 92901:001:0264), Metsaküla, Põhja-Pärnumaa rural municipality, for target species - common cranes (Grus grus) and Anseriformes Bats: Study of the preliminary environmental assessment of the detailed design for the reconstruction and construction of Põhja pst and Muuseumi tee regarding the presence of bats and the implementation of possible mitigation measures
Visual impacts	Astrid Koplimäe Piret Toonpere	Master of Science in Environmental Management. The topic of the master's thesis 'The Visual Impact of Wind Farms on the Landscape and Ways to Reduce It' [„Tuuleparkide visuaalne mõju maastikule ja selle vähendamise võimalused"]. Experience in WindPro visibility analysis and compiling visualizations since 2009.

In the course of carrying out the SEA, additional experts may be invited to participate in the SEA process as needed.

The work also includes previously prepared expert opinions, studies and other relevant works regarding the area.

4 Parties invited to participate and parties invited to cooperate

In order to prepare the spatial plan, an engagement and communication expert will be involved, whose task will be, among other things, to prepare an engagement plan and a communication plan. The following description of participation is therefore preliminary and is based on requirements set out in the Planning Act.

Pre-selecting a location for the municipal designated spatial plan is carried out in cooperation with the authorities of the executive branch in whose area of government the issues addressed by the plan fall. The minister in charge of the policy sector and any persons whose rights the municipal designated spatial plan may affect, as well as any persons who have expressed an interest in being invited to participate in pre-selecting location for the plan, and any persons or authorities who may have a legitimate interest in the resulting significant environmental impact that may be presumed to be triggered by, or in the implementation of, the plan – including, through an organisation that unites them, environmental non-governmental organisations – are invited to participate in pre-selecting a location for the plan. Any person whose interests the municipal designated spatial plan may affect may be invited to participate in pre-selecting a location for the plan.

The persons and authorities who are expected to be impacted by the proposed activity under the strategic planning document or have a legitimate interest in the strategic planning document (as at a time of preparation of the initial positions and the SEA programme) have been submitted in Table 3.

During the designated spatial plan and the SEA process, the list of affected and/or interested parties and institutions may change.

Persons and institutions are notified in accordance with the procedure provided for in the Planning Act. Various forms of participation are used (including public discussions, notification, working meetings, etc). Information about the designated spatial plan will be published at https://www.valga.ee/tuulepargi-eriplaneering and https://www.valga.ee/eriplaneeringu-teated.

Table 3. Parties invited to participate and parties invited to cooperate (the list will be updated on an ongoing basis).

Party	Reasoning for invitation to participate/cooperate
Parties invited to cooperate	
Estonian Ministry of Defence	If a wind farm is planned under a spatial plan and the implementation of the spatial plan may lead to a decrease in the planned working capacity of the national defence buildings.
Estonian Environmental Board	The implementation of the spatial plan may have a significant environmental impact, protected objects located in the planning area.
Land Board	The planning area contains mineral deposits registered in the register of mineral resources.
National Heritage Board	The planning area includes immovable monuments and archaeologically sensitive areas.
Police and Border Guard Board	A wind turbine with a height of more than 28 m is planned and thus the activity belongs to the field coordinated by the PBGB.
Agriculture and Food Board	Land improvement systems located in the planning area and the proposed activities may impact the proper functioning of the land improvement system.
Estonian Rescue Board	The spatial plan involves fire safety requirements.
Estonian Ministry of Regional Affairs and	Agricultural policy maker.

Party	Reasoning for invitation to participate/cooperate
Agriculture	
Estonian Centre for Defence Investments	A building with a height of over 28 m is proposed under the spatial plan.
Estonian Health Board	The spatial plan addresses the implementation of health protection requirements, including noise and vibration issues.
Estonian Transport Administration	State roads are located in the planning area; a structure with a height of more than 45 m is proposed, which can cause visual disturbances for road users on the highway.
Ministry of Climate	The implementation of the spatial plan may lead to a transboundary environmental impact and it is necessary to invite the Republic of Latvia to participate in the planning and SEA procedure
Persons and institutions invited to participate	
Järva rural municipality Otepää rural municipality Republic of Latvia	A local government bordering the planning area may have a legitimate interest in the proposed activity.
Estonian Consumer Protection and Technical Regulatory Authority	Ensuring safety oversight
	The ministry engaged in the field of accelerating the development of renewable energy, the planning area includes a mineral deposit registered in the register of mineral resources. Transboundary impact
Elering AS, Elektrilevi OÜ	Electrical installations operators.
Telia Eesti AS, Elisa Eesti AS, Tele2 Eesti AS, Eesti Lairiba Arenduse Sihtasutus The IT and Development Centre of the Ministry of the Interior	Mobile and communications service providers known in the area. Those responsible for the functioning of national communication systems.
Estonian Keskkonnaühenduste Koda Estonian Fund for Nature	An organisation uniting environmental organisations. Ensuring environmental protection in the public interest
State Forest Management Centre (RMK) MTÜ Eesti Erametsaliit	The designated spatial plan area includes areas of state forests. Representing the interests of forest owners
MTÜ Eesti Tuuleenergia Assotsiatsioon (Estonian Wind Power Association) MTÜ Eesti	Representing interests related to wind and renewable energy developments

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Party	Reasoning for invitation to participate/cooperate
Taastuvenergia Koda (The Estonian Renewable Energy Association)	
Maaelu Teadmuskeskus (Centre of Estonian Rural Research and Knowledge)	Advising on the designation of valuable agricultural lands
Valgamaa Jahimeeste Ühistu (Valgamaa Hunters' Cooperative)	Representation of hunting territory and hunting interests
Estonian Environment Agency	Expressed a desire to be invited to participate, making assessments of the state of the environment
The general public, eg residents of the region, companies operating in the rural municipality, etc	Potential interested or affected parties. It is possible to notify Valga Rural Municipality Government of your wish to be invited to participate, you can also express your wish to participate in public discussions. Private persons and companies who have expressed their wish to participate are not listed separately in this table, the corresponding list is kept by Valga Rural Municipality Government and is updated on an ongoing basis.
Estonian Ministry of Regional Affairs and Agriculture	With regard to unreformed state lands and land units, the authorised authority of which is the Land Board, views on the municipal designated spatial plan are given by the Ministry of Regional Affairs and Agriculture. Person ratifying the designated spatial plan.
Republic of Latvia	The implementation of the spatial plan may lead to a transboundary environmental impact and it is necessary to invite the Republic of Latvia to participate in the planning and SEA procedure.

5 Time table

The following time table is preliminary and indicative and will be specified during the further planning process.

Table 4. The time table for the resolution on the pre-selection of the designated spatial plan and the SEA location selection stage.

Stage	Description	Time
Initiation of the DSP and the SEA	Initiated on 25 October 2023 under Valga Rural Municipality Council resolution No 81.	25 October 2023
Initial map analysis	Map analysis – the restrictions and limitations within the designated spatial plan area are mapped, including the known exclusionary restrictions and areas of interest of the interested party are identified.	March 2024
Preparation of drafts for initial positions of the DSP and the SEA programme	Preparation of initial positions of the DSP and the SEA programme	March 2024
Disclosure of the initial positions of the DSP and the SEA programme	The authority arranging creation of the DSP arranges the public display of the IP and SEA programme of the municipal designated spatial plan. At the same time, the opinion of the persons invited to participate and the persons invited to cooperate is sought.	April to May 2024
Information day	Information day outside the Planning Act – introduction to the IP and SEA programme and renewable energy targets in general	16th May 2024 in Tsirguliina society house
Public discussion of the initial positions of the DSP and the SEA programme	Public discussion of the results of public display within 45 days following the end of the display.	June to July 2024
Supplementing the initial positions of the DSP and the SEA programme, responding to proposals	On the basis of the results of the public display and public discussion, the necessary amendments are made to the initial positions of the DSP and the SEA programme of local governments, preparation of an overview of opinions and their considerations.	July 2024
Preparation of DSP and the report concerning the location pre-selection stage of SEA.	Preparation of explanatory memorandum of the DSP and report concerning the location pre-selection stage of SEA	July to November 2024
Information day	Planning Act external information day – Workshop on visual impacts and introduction to the current state of the spatial plan	August 2024
Feedback provided by the client and the interested party	The client and the interested party review the submitted drafts and provide their feedback.	December 2024
Preparation of the draft resolution	Making amendments based on the proposals of the client and the interested party. The client prepares the draft resolution(s).	January 2025
Presenting the draft resolution, explanatory memorandum and the report concerning the location pre-selection stage of SEA for approval and opinions	The persons invited to participate are asked for their opinion and the persons invited to cooperate will be asked for approval. On the basis of the approvals granted and opinions provided, the necessary amendments will be made to the draft resolution of pre-selecting the location for the municipal designated spatial plan and the report of the first stage of the SEA.	February to March 2025

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Public display of the draft resolution of pre-selecting the location and the SEA report on the location selection stage	The local government will arrange a public display of the draft resolution of pre-selecting the location for the municipal designated spatial plan and of the report concerning the first stage of strategic environmental assessment at least in the centre of the local government unit of the planning area with a duration of at least 30 days.	April to May 2025
Public discussion of the results of public display of the draft resolution of pre-selecting the location and of the report concerning the location selection stage of SEA	A public discussion will be arranged at least in the centre of the local government unit within 45 days after the end of the public display.	June 2025
Consideration of the results of public display and public discussion of the draft resolution of pre-selecting the location and of the report concerning the location selection stage of SEA	Based on the results of public display and public discussion, the necessary amendments are made to the draft resolution of pre-selecting the location of the municipal designated spatial plan and the report concerning the first stage of the SEA.	July to August 2025
Adoption of the resolution of pre-selecting the location and the report concerning the location selection stage of SEA	The local government council makes a resolution on the pre-selection of the location of the municipal designated spatial plan and on the adoption or refusal of the first stage SEA report.	September 2025
Ratification of the municipal designated spatial plan (if a further procedure according to the design specifications is possible)	The municipal designated spatial plan is submitted to the minister for ratification. The minister ratifies the municipal designated spatial plan or refuses to ratify it within 60 days. In justified cases, the time limit may be extended to 90 days. The minister may propose that the municipal designated spatial plan be brought into effect in part.	October to November 2025
Bringing the municipal designated spatial plan into effect (if further procedure according to the design specifications is possible)	The municipal designated spatial plan, ratified by the minister, is brought into effect by a resolution of the local government council.	December 2025