

The analysis of spatial impact of socio-economic trends. Baseline research for the national strategic spatial plan

The purpose of **the national planning baseline study** was to analyze the impact of international and domestic trends on the spatial development and land use in Estonia, to identify the most important domestic decision-making points related to the development of spatial and land use, and to propose starting points and guidelines for a new national spatial plan (NSP). Estonia's future operating environment is mainly shaped by global megatrends and Estonia's ability and (political) will to take advantage of emerging opportunities, mitigate risks and consider limitations. The most important global megatrends affecting Estonia and their general impacts are:

1. Climate change and green policies create the need for spatial shifts in life activity (change of locations): changes in the regional balance of the quality of the living environment (usability as a place of residence and for economic activity) and the resulting migration pressure; restrictions on the use of fossil energy sources and land use with a large negative climate impact;
2. Digitization and automation support the spatial polarization of life activities - simultaneous concentration and dispersion: there is a deepening of regional competition favoring global and domestic development leaders, but also the creation of technological prerequisites for a more dispersed life and economic activity;
3. Geopolitical polarization, a new hot and cold war cause the continued slowdown of globalization and the regionalization of value chains; growing communication barriers, accentuation of differences and military threats;
4. Cultural change increases the struggle for high-quality space: the growth of multiculturalism and generational differences diversify the expectations for the quality of space; the change in governance culture, the strengthening of communities and civil society increases the

number of interests and interest groups in spatial policy.

Taking into account Estonia's development assumptions and factors and based on the assessments of more than 50 industry experts, the study defined 37 of the most likely future trends for Estonia in the perspective of 10 and 30 years. The sectoral trends with the greatest spatial impact in Estonia, which should be taken into account in spatial policy and the preparation of NSP, are:

1. Population growth based on a positive migration balance (return migration of Estonians, immigration from poorer countries) together with the aging of the population (slowing down due to immigration) and the growth of cultural diversity;
2. Continued concentration of population and economic development in the capital region;
3. The growth of the absolute and relative prosperity of the society - the level of economic development (including wages, prices) of the Nordic countries is reached and/or equalized;
4. Energy revolution - abandonment of oil shale energy (or its minimization) and a large increase in distributed renewable energy; large increase in the share of electricity and consumption volume - electrification of transport, increase in electricity demand related to production and automation, smart houses and infrastructure objects;
5. A decrease in the need for movement based on the change in the nature of work and consumption and a change in the ways of movement based on technological possibilities (towards micro-mobility and mobility as a service);
6. Aggravation of the security situation in Estonia as a border country and the disruption of most of the connections to the east;
7. As a result of enabling remote work and security considerations, spatial mobility

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and living in several places have increased, meanwhile, abandoned housing in sparsely populated and small settlements has been put into use.

The results of the impact analysis of trends show that future trends contribute positively to the sustainable development of Estonian society, while the regional balance would deteriorate due to their influence. The overall effect of the trends on the quality of space is neutral - the positive and negative effects balance each other. The combination of trends on the settlement system is polarizing. The effects are predominantly positive for the capital region (i.e. also Northern Estonia as a region) and potentially to the urban areas of larger regional centers and additionally (albeit to a lesser extent) also for scattered settlements. Due to the trends, rural central settlements (small towns, larger villages) are under the greatest pressure. Even in the case of county centers and small towns, negative effects prevail. The biggest negative effects or risks arise from the trends for Eastern and North-Eastern Estonia, and the biggest opportunities for Western Estonia. Based on the results of the baseline study, the following recommendations are made:

1. The content of NSP, its spatial solutions, must be based on unambiguously understood and thoroughly considered basic principles of social development. Considering the global and EU strategic, regulatory and business environment and the choices made in the Estonia 2035 strategy, these basic principles should be the principles of sustainable development. Among other things, it also entails the need to plan for sustainability, abandoning the use of space, compacting and shrinking the built living environment.

2. A part of the NSP solution must be the definition of the principle of the timing of spatial political interventions at a strategic level - proactive interventions

that motivate and amplify positive trends and spatial effects, or interventions that adapt to current needs.

3. NSP must take into account the currently known game changers when planning spatial solutions and include conditional spatial policy interventions associated with them. Substantial and temporal criteria must be defined, on the basis of which it is possible to decide whether the condition has been met (the game changer has indeed been realized or is about to be realized) and the location selection or other space use principles previously defined in the NSP will come into force.
4. Transform the NSP into a basic document of spatial development, which defines a wide range of planning instruments instead of the current vision document. Spatial visions of parts of the territory are presented throughout, as well as measurable goals. Among other planning instruments, a suitable choice is made based on the nature of the topic by answering the question of how to most appropriately direct the development of a part of the territory in the NSP, taking into account regional and local characteristics and the change in the development context - either (a) defining a specific correct solution in the NSP or (b) formulating in the NSP the conditions and principles that based on this, it is possible to develop and establish purposeful spatial policy solutions in a more flexible and context-sensitive manner in lower level planning. For this purpose, to expand the range of tasks of NSP in the Planning Act in terms of planning instruments and to disconnect them from specific topics.
5. Provide guidelines, conditions and/or criteria in the NSP, based on which the preparation of thematic plans that change the NSP is initiated. In general terms, this condition is a significant change in the environment of spatial development, which makes NSP spatial solutions obsolete

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and hinders (sustainable) spatial development.

6. Determine and delineate territorially the regions in NSP, for which partial plans of the territory (regional plans) are made. Regional plans are drawn up under the leadership of the central government of the country, but with a different decision-making mechanism from NSP and NSP thematic plans – their approval is given to regional councils. An important content of NSP is the definition of detailed tasks for regional plans. Establish a special mechanism for the preparation and establishment of a territorial partial plan (the role of regional councils) in the Planning Act.

7. Prepare a road map based on the logic of the chain of influence for each objective (theme, part of the territory) in order to ensure the implementation of the spatial development goals defined in the NSP, which includes planning instruments as well as other (scheduled) spatial policy instruments listed above. The latter are the central object of coordination of spatial policy and sectoral policies. For example, such roadmaps may contain proposals for specific procurement conditions, standards, investments, components of the municipal financing model, etc., necessary to achieve spatial policy goals. about which must be sold to general or sectoral policies within the framework of various co-creation and coordination processes.

8. Among the planning instruments of the NSP, thematic sets of principles, conditions and criteria must be directed to the compilers of local government general plans, on the basis of which considered spatial policy decisions are made in general plans.

9. Critical analysis of national sectoral development plans in terms of their spatial effects is part of the NSP process - what kind of space do they shape, what is its consistency with the possible strategic

options of the NSP. Part of the process of drawing up national development plans is a preliminary impact assessment of spatial policy solutions of the NSP (combined impact and compliance analysis), from which guidelines for field policies grow.

10. The process of drawing up the NSP must be creative, inclusive, flexible, experimental and allow for mistakes - mechanisms are needed that would provide an opportunity to learn from mistakes and solve them within the process. The key point of inclusion is the partial delegation of choice-making to society (e.g. applying the principle of random sampling of climate collections and learning decision-making).
11. Develop the NSP communication strategy and implement it in horizontal cooperation between ministries and in vertical cooperation involving local governments and communities. Promote residents' spatial competence both in formal education (starting from elementary school) and in public information spaces, as well as within the framework of various spatial knowledge cocreation events (primarily at the local and community level).