ESTONIAN CHAIRMANSHIP 2024 - 2025 | VASAB VISION & STRATEGIES AROUND THE BALTIC SEA | POLISH CHAIRMANSHIP 2025 - 2026

Analytical background paper: VASAB Vision 2040 and spatial resilience

How is the whole-of-government all-of-hazards logic represented in the long-term spatial strategy?

The document was prepared during the Estonian chairmanship and the subsequent Polish chairmanship of the VASAB network. It was developed by the Estonian Ministry of Economic Affairs and Communications and the Polish Ministry of Development Funds and Regional Policy. Members of the VASAB Committee on Spatial Planning and Development of the Baltic Sea Region (CSPD/BSR) contributed to the document through written comments and oral input. The document served as a basis for the *VASAB Ministerial Tallinn Declaration on Spatial Resilience*, adopted on 29 June 2025 by the Ministers responsible for spatial planning and development, and for setting the priorities for the upcoming Polish chairmanship in the VASAB network.

June 2025

Background Policy Paper: Strengthening Spatial Resilience in the Baltic Sea Region

1. Context

International crises such as the COVID-19 pandemic, extreme weather conditions, disruptions in trade and stockpile provision, hybrid threats, migrant influx and above all Russian full scale invasion of Ukraine determine in a very significant way the area of regional spatial planning and territorial development. Topics that were previously peripheral are now central to decision-making across the Baltic Sea region (BSR). Addressing these new realities requires a whole-of-government approach in which spatial planning and territorial development play a key role in resolving spatial conflicts, fostering synergies, and developing resilient, future-proof settlement structures.

The recent report by former European Central Bank President Mario Draghi [1] underscores the need for Europe to take further steps towards greater coordination, economic alignment, and competitiveness. Key pillars of economic resilience closely linked to territorial development include sufficient provision of low-carbon and accessible energy, the use and beneficiation of domestic raw materials, and the

[1] The future of European competitiveness: Report by Mario Draghi (2024). Accessed 26.10.2024: https://commission.europa.eu/topics/strengthening-european-competitiveness/eu-competitiveness-looking-ahead_en

promotion of energy-intensive clean industries. Many of Draghi's recommendations emphasize deregulation and streamlined bureaucratic processes to enhance Europe's global competitiveness and by that facilitating entrepreneurship and investments which are core for regional and local resilience. Over the recent years, the European Union has been developing numerous policy initiatives to increase the competitiveness of Europe's business environment by introducing initiatives such as the Net-zero Industry Act[2], the RED III directive[3], or the defence industry act[4].

With all VASAB members now part of NATO, there is a growing consensus on the importance of integrating security considerations into spatial planning and territorial development in the Baltic Sea Region. VASAB members[5] share a harmonious view of the values, risks and challenges that might influence the development of the Baltic Sea region in the short and long run. The foundation of the aforesaid consensus is provided by the principles set out in the charter of the United Nations and by the right and freedom of every nation to choose its own security solutions.

Given Europe's current security environment, Draghi also highlights the need for strategic autonomy in defence, supporting initiatives like the European Defence Industrial Strategy (EDIS)[6], common procurements, and industrial partnerships for securing key technologies.

Crisis preparedness goes beyond the activities related to national defence. For instance, Estonia's national security policy exemplifies a holistic approach that integrates security considerations across societal and governmental actions/initiatives[7]. This perspective is gaining traction across Europe. In early 2024, European Commission President Ursula von der Leyen tasked former Finnish President Sauli Niinistö with drafting a report on enhancing Europe's societal resilience, civil protection[8], and defence preparedness. Russia's aggression against Ukraine has shuttered many illusions for Baltic Europe, including the illusions that peace is permanent and supply of energy resources from Russia is reliable. Thus, it is so important to fertilize Europe with the broader mind-set that the countries bordering

[2] https://single-market-economy.ec.europa.eu/publications/net-zero-industry-act_en?utm_source=chatgpt.com
[3] https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en
[4] https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1321
[5] Since 2022, the participation of Russia and Belarus is suspended in VASAB activities.
[6] Our common defence industrial strategy (2024). Viewed 26.10.2024: https://defence-industry-space.ec.europa.eu/eu-defence-industry/edis-our-common-defence-industrial-strategy_en
[7] Rebublic of Estonia, Government (2023). *National Security Concept of Estonia*. Accessed 27.09.2024: https://www.kaitseministeerium.ee/sites/default/files/eesti_julgeolekupoliitika_alused_eng_22.02.2023.pdf
[8] According to Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism, Article 1(2), Union Civil Protection Mechanism *shall cover primarily people, but also the environment and property, including cultural heritage, against all kinds of natural and man-made disasters, including the consequences of acts of terrorism, technological, radio logical or environmental disasters, marine pollution, hydrogeological instability and acute health emergencies, occurring inside or outside the Union. In the case of the consequences of acts of terrorism or radiological disasters, the Union Mechanism may cover only preparedness and response actions*.

Russia shared since 2014 [9]. Niinistö's report [10] emphasizes spatial resilience, highlighting the importance of dual-use infrastructure, community-level crisis preparedness, and the resilience of critical infrastructure. These areas of security remain at utmost importance in terms of whole-of-society resilience.

Aditionally, the ReArm Europe Readiness 2030 initiative[11] has been proposed to boost EU defence capabilities. The intervention drives significant territorial impacts through new industrial facilities, logistics sites, and infrastructure upgrades across regions. These large-scale defence investments have the potential reshape regional industrial geography and influence land-use, transport corridors, and spatial development priorities.

Europe's future depends on greater unity and collaboration with regional and global partners, as outlined in the EU's Strategic Compass[12]. Building networks, fostering trusted partnerships, and engaging like-minded countries are vital for managing crises. The Sendai Framework for Disaster Risk Reduction[13] provides a structured approach for enhancing resilience at the regional level. In the Baltic Sea Region adapting global disaster risk reduction goals to local needs, by engaging governments, regional authorities, NGOs, private sector representatives, and community organizations, will strengthen resilience and inclusion. The effective implementation of risk reduction measures in the BSR ultimately depends on coordinated regional action.

Spatial/territorial resilience is crucial to Europe's overall resilience, particularly in the BSR. Without coordinated efforts to strengthen economic, physical, and community resilience, individual Member States may struggle to adapt to shifting security dynamics. Building spatial/territorial resilience requires cross-border solutions for connectivity including energy grid, resource distribution, and crisis-resilient infrastructure to ensure rapid response and recovery from disruptions.

2. Approach

This analysis follows a comprehensive security approach, considering Europe's evolving risk landscape. It adopts an all-hazards methodology, emphasizing risk management and reduction, particularly through cooperation within the macro-region, regional planning and prevention strategies. The analysis incorporates recent EU policy recommendations, including Draghi's and Niinistö's reports, as well as the mission letters of key commissioners such as Andrius Kubilius (Defense and Space) and

[9] Press statement by the President: former President Niinistö (2024). Accessed 25.10.2024 URL: https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_24_1602
[10] https://commission.europa.eu/document/download/5bb2881f-9e29-42f2-8b77-8739b19d047c_en?filename=2024_Niinisto-report_Book_VF.pdf
[11] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52025JC0120
[12] EEAS. EU Strategic Compass. Accessed 04.10.2024: https://www.eeas.europa.eu/eeas/strategic-compass-security-and-defence-1_en
[13] Sendai Framework for Disaster Risk Reduction 2015 - 2030 Accessed 02.03.2025 https://www.undrr.org/media/16176/download?startDownload=20250303

Raffaele Fitto (Cohesion and Reforms). Findings are aligned with the VASAB Vision 2040 document's key focus areas.

3. Observations

In the following sections, several observations are proposed, highlighting the importance of spatial/territorial resilience for the Baltic Sea region. These are derived from a comparison between the comprehensive security approach and the VASAB Vision 2040 document, with the primary goal of addressing existing gaps in the current VASAB Vision 2040. Considering the challenges outlined above, these actions aim to enhance evolutionary/exaptive resilience [14] [15] taking into consideration the preparedness realities in Europe, especially considering the context of the BSR. Some observations are concluded with the lineation of the thematic areas that should be addressed by CSPD in further works.

3.1. Infrastructure that supports both civil and military use and can cope with extreme weather conditions

The Trans-European Transport Network (TEN-T[16]) strengthens EU territorial cohesion by creating seamless transport systems across borders. The EU military mobility initiative envisions an enhanced connectivity with regional bilateral partners and dialogue with strategic partners like the CBSS[17]. Attention needs to be given to making full use of civil infrastructure like seaports, airports, roads and railways bearing in mind the necessity of dual use of the infrastructure in the BSR, in terms of military mobility. Kubilius' mission letter underscores the need to strengthen transport corridors for dual-use infrastructure. Key challenge is to eliminate missing links on main transport corridors. Plans should cover Core and Extended TEN-T Core Network, cross border connections, hot-spot projects, identification and elimination of missing links and bottlenecks especially on four priority multi-modal military mobility corridors[18].

One of the key challenges in this regard is the harmonization of railway gauges. The updated TEN-T regulation emphasizes that differing track gauges hinder railway

[14] In recent years, resilience has become a topic widely discussed and explored by scientists and researchers. As a result, there are many definitions of this concept. With regard to exaptive resilience, one of the most popular definitions is the one developed for the TERRA RES project, which states that: *Territorial exaptive resilience is a region's ability to repurpose its existing resources and capabilities, which were originally developed for different functions, to create new growth opportunities and evolve in response to changes or crises.*
Kollár, D., Miskolczi, B., Masik, G., Martinaitis, G., Reid, J. & Kollár, J. (2024) *Territorial exaptive resilience along EU eastern borders – TERRA RES. Final report*. Luxembourg: ESPON EGTC.
[15] Davoudi S. (2012) INTERFACE Resilience: A Bridging Concept or a Dead End? Planning Theory & Practice, 13, (2): 299–333
[16] EU TEN-T Regulation. Accessed 27.09.2024: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1679
[17] EEAS. Military Mobility. Accessed 27.09.2024: https://www.eeas.europa.eu/sites/default/files/documents/2024/2024-02MilitaryMobility.pdf
[18] https://transport.ec.europa.eu/transport-themes/military-mobility_en

interoperability and competitiveness[19]. Standardizing rail gauges to the European 1435 mm standard will enhance connectivity, speed up transport, and increase civil protection ability and ensure military mobility across the region.

Infrastructure and settlements in the Baltic Sea Region must be designed to endure increasingly severe extreme weather events, as climate change drives rising sea levels, stronger storm surges, shifting precipitation patterns that directly affect coastal protection, ports, and transport systems. Coastal municipalities across the region are already experiencing heightened exposure to storms and flooding, underscoring the urgent need to integrate climate-risk considerations into long-term spatial and territorial planning. To ensure resilience, future infrastructure development must incorporate robust, climate-adapted construction standards that safeguard critical systems against escalating environmental pressures. These elements should be considered already during planning processes. To support it, BSR countries Germany, Poland, Latvia and Estonia together with VASAB and HELCOM Secretariats are collaborating in Interreg BSR project platform Baltic PlaNet[20]. It aims to bring together coastal municipalities to unify their responses to extreme weather events through joint spatial planning, offering practical tools, training, and peer exchange to protect natural and urban areas.

A key way to build climate-resilient infrastructure is through nature-based solutions (NBS). Latvia and Estonia are jointly implementing the LIFE LATESTadapt[21] project to strengthen the resilience of urban areas to extreme weather[22].

According VASAB Vision Paragraphs:

Strings describe secure physical and virtual connectivity and energy networks across and within the Baltic Sea Region. This includes also viable investments which ensure military mobility, e.g. via the dual use of infrastructure, and the necessary measures for resilient transport and the protection of critical infrastructure for road, rail and

[19] Regulation (EU) 2024/1679 of the European Parliament and of the Council of 13 June 2024 on Union guidelines for the development of the trans-European transport network, amending Regulations (EU) 2021/1153 and (EU) No 913/2010 and repealing Regulation (EU) No 1315/2013 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1679: *the railway track gauge different from that of the European standard nominal track gauge of 1435 mm severely hampers the interoperability of the railway networks across the Union and even impacts the competitiveness of those isolated railway networks. New railway lines of the core network or extended core network should therefore be built in European standard nominal track gauge of 1435 mm. In addition, Member States with a network with a track gauge different from that of the European standard nominal track gauge of 1435 mm should assess the migration of existing lines of the European Transport Corridors to the European standard nominal track gauge of 1435 mm*

[20] https://interreg-baltic.eu/project/baltic-planet/

[21] https://lifelatestadapt.viimsivald.ee/about-project/

[22] It develops and tests measures to reduce pluvial flooding caused by heavy rainfall, including designing new climate resilient plant communities, creating flood simulation models, and building an integrated decision support system. These solutions will be piloted in eight urban demonstration sites across both countries. The project also supports municipalities in integrating green infrastructure and NBS into planning through co created policies, maintenance guidelines, and urban greening plans. In parallel, it strengthens local government capacity and raises public awareness about climate adaptation and community driven NBS.

maritime infrastructure hubs. Relevant sections in the VASAB Vision 2040: Introduction; paragraphs 10, 45, 49, 51, 52, 59-61, 64, 130 (Strings, Patches, Systems).

Conclusion:

The actions that VASAB committee should enhance in further works should be devoted to integrating dual-use infrastructure and underpin the territorial cohesion in transport infrastructure with dual-usage and planning of climate resilient infrastructure

3.2. Energy Security

Securing the region's energy supply is essential for self-sufficiency and resilience. The Trans-European Networks for Energy (TEN-E[23]) policy and the REPowerEU Plan[24] advocate for energy independence, diversification, and the transition to renewable sources. Russia's use of energy exports as a geopolitical tool has reinforced the need for reducing dependency on external suppliers. Already before the 2020-s, it was noted that Russia and other energy-rich authoritarian states use their energy exports for both economic gain and as a tool to leverage their foreign policy aims[25]. With the Russian full scale invasion in Ukraine, this understanding has only intensified, and forms one of the cornerstones of the REPowerEU Plan. The European Parliament has declared Russia to be as a state sponsor of terrorism[26], Estonian, Latvian and Lithuanian Parliaments made similar statements in the preceding months[27]. Thus, the REPowerEU Plan emphasizes boosting renewables, improving energy efficiency, and fostering collaboration to ensure a sustainable energy system. Connecting all the Baltic States as well as Poland to the CEPS (Central Europe Pipeline System) would insure fuel capabilities for dual use purposes.

In 2025 Estonia, Lithuania and Latvia departed the BRELL ring (Russian-dependent electricity system) and connected to the continental European electricity grid. The synchronization of the Baltic states with the continental European grid appeared to be successful.

[23] EU TEN-E Regulation. Viewed 27.09.2024: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R0869

[24] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. REPowerEU Plan {SWD(2022) 230 final}. Accessed 16.11.2024: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52022DC0230

[25] Energy as a tool of foreign policy of authoritarian states, in particular Russia. Study commissioned by the European Parliament's Committee on Foreign Affairs. (2018). Author: Rem Korteweg. Accessed 15.11.2024:

[26] Press Releases. European Parliament (23.11.2022) European Parliament declares Russia to be a state sponsor of terrorism. Viewed 27.09.2024: https://www.europarl.europa.eu/news/en/press-room/20221118IPR55707/european-parliament-declares-russia-to-be-a-state-sponsor-of-terrorism

[27] Press releases, Foreign Affairs Committee (18.10.2022) *Riigikogu declared Russia a terrorist regime.* Accessed 27.09.2024: https://www.riigikogu.ee/pressiteated/taiskogu/riigikogu-kuulutas-venemaa-reziimi-terroristlikuks/; Saeima adopts statement declaring Russia a state sponsor of terrorism: https://www.saeima.lv/en/news/saeima-news/31309-saeima-adopts-statement-declaring-russia-a-state-sponsor-of-terrorism

According Paragraphs in the VASAB Vision 2040:

The importance of energy independence and access to sustainable, emissions-free or low-emissions energy also in disruptions should be addressed in the Baltic Sea Region's long term spatial vision. Relevant sections in the VASAB Vision 2040: Introduction; paragraphs 86-91, 101, 113, 58 to 66 (Strings, Patches).

Conclusion:

In VASAB Vision 2040 energy independency, disparity and foundation on renewable sources was addressed. Nevertheless, current circumstances force VASAB to accelerate the efforts and undertake new actions to achieve that in shorter perspective.

3.3 Managing Connectivity-Related Risks

Infrastructure Networks that offer mutual links and connections between the Pearls in the BSR are an essential element of cohesion from the societal development perspective. While regional connectivity fosters economic and social cohesion, it also creates dependencies that can become vulnerabilities. This applies to energy and transport networks as discussed above, but also to information transmission grid, telecommunication cables, pipelines, positioning systems and other similar networks. New tools that enhance connectivity should be designed and constructed to minimize potential domino effects caused by service disruptions. Applying the Security by Design and Preparedness by Design principles to infrastructure and digital services will mitigate potential risks[28]. A suitable example could be adopted by Germany The KRITIS Umbrella Act[29]. The law defines at federal level which companies and institutions are considered part of Germany's critical infrastructure. To be classified as critical, a facility must be essential for the overall supply in Germany and serve more than 500,000 people. Additionally, the law establishes nationwide, cross-sector minimum standards for the physical protection of critical infrastructures[30].

BSR investments should be screened to ensure security and reliability. It should be ensured that the BSR's vital and other important networks like infrastructure, energy or data systems are backed by trusted investments from reliable counterparts. The EU

[28] European Commission. Interoperable Europe. Security by Design. Accessed 03.10.2024: https://joinup.ec.europa.eu/collection/common-assessment-method-standards-and-specifications-camss/solution/elap/security-design

[29] The KRITIS Umbrella Act (KRITIS-Dachgesetz) brings together the following sectors for the first time: energy, transport and traffic, finance and insurance, healthcare, drinking water, wastewater, municipal waste disposal, information technology and telecommunications, food supply, space, and public administration.

[30] These standards may include measures such as emergency response teams, improved physical security, and fail-safe systems. The requirements are based on risk analyses and risk assessments developed by the responsible government authorities and provided to operators. The law also introduces a mandatory reporting obligation for incidents. Federal states have the opportunity to identify further critical infrastructure that fall solely within their remit.

has stepped up corresponding coordination and policy making by promoting the investment screening mechanism[31].

It is also important to strengthen cooperation, including with NATO, on the protection of undersea critical infrastructure. This refers to equipment and technology placed on or anchored to the Baltic Sea floor. Such infrastructure primarily includes telecommunication cables, as well as electricity and fuels transmission lines.

According Paragraphs in the VASAB Vision 2040:

Strings are characterised by a sustainability, digitalisation and innovation shift together with responsible consumption and connect different places and people in the Baltic Sea Region. This includes also viable investments which ensure the necessary measures for the protection of critical infrastructure for virtual infrastructure networks and hubs. Relevant sections in the VASAB Vision 2040: Introduction; paragraphs 46, 48, 52, 77-85, 90, 96 (Strings).

Conclusion:

In VASAB Vision 2040 importance of connectivity and infrastructure was addressed extensively, however VASAB needs to further explore resilience aspects of developing and protecting such infrastructure.

3.4. Territorial Cohesion

Enhancing communities engagement strengthens social and territorial cohesion and crisis preparedness but might also increase the quality of life of their inhabitants. It is pivotal for the whole of BSR to support regions lagging behind, in particular those at the external EU border, and to respond to the depopulation and peripheralization processes. Promoting polycentric development and fostering connections between territories to boost local economies supports these places according to their needs and potentials, to become vital regions.

The emphasis on remote and border areas must be strengthened, as they serve as strongholds of community preparedness and carriers of shared values[32]. The Russian full-scale invasion of Ukraine, along with challenges related to service provision in peripheral and shrinking areas, has highlighted the need to rethink the role of resilient communities in smaller settlements. Additionally, the rise of radical and populist movements can be linked to the persistent disparities between wealthier and less developed areas in the BSR. Supporting the development and transitions of remote

[31] Investment screening, European Commission. Accessed 21.11.2024: https://policy.trade.ec.europa.eu/enforcement-and-protection/investment-screening_en

[32] It was also studied in ESPON CHANEBO project, where new territorial evidence on possible reorientation of development trajectories of the north-eastern EU border regions was produced. CHANEBO identified, mapped and analyzed the economic and social consequences that the new geopolitical context has set on the four external EU border regions of the project stakeholder partnership: South-Karelia (FI), Ida-Viru (EE), Latgale (LV), and Ignalina (LT): https://www.espon.eu/projects/chanebo-challenges-eus-north-east-external-borders

areas also means applying the "Leave No One Behind" principle from the European Green Deal package in practice.

According Paragraphs in the VASAB Vision 2040:

Enhancing the sense of belonging as a driver for social coherence in the next generation of the VASAB vision. Relevant sections in the VASAB Vision 2040: paragraphs 11-31.

3.5. Ensuring Food security

Recent crises have underscored the need to strengthen local economies and food production to reduce reliance on global supply chains. Economic dependencies can be exploited for geopolitical leverage, making resilience essential. Moreover, more sever and frequent outcomes of the climate change directly influence the food production in most of BSR regions, that includes droughts[33], unprecentented change of the weather (unexpected warm waves, late snow falls or freezes) cause a danger for crop production and profitability of farmers. Industrial food production (both crop and animal) drive into weakening of soil.

Equally important is access to local basic supply in terms of drinking water or heating. The access to fresh water should be also considered in the context of climate change (and water scarcity in some parts of BSR), as well as backup/emergency water supply for a variety of potential crises.

The problem of access to drinking water in a crisis situation or during war will primarily affect urban areas. In this context, both spatial planning solutions — taking into account the location and construction of deep wells — and logistical solutions are essential, including the availability within municipal civil protection structures of mobile water tankers and mobile water treatment stations.

Niinistö's report[34] calls for an EU Stockpiling Strategy, alongside streamlining spatial planning to enhance investment competitiveness. Strengthening local economies and boosting regional economic development for both BSR industries and food production ensures business and societal resilience in case of disruptions on global markets.

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[33] For example, according to the analysis of environmental trends conducted for the purposes of the National Development Concept 2050, in Poland *the frequency of droughts has increased significantly. In the years 2010–2019, such events occurred twice as often as in previous decades*, and *in the coming decades, further intensification of droughts is to be expected*. In 2021, *hydrological droughts posed a threat to 95.4% of Poland's territory.* Hajto M. (red.), Bojanowicz-Bablok A., Kornatowska B., Skotak K., Kuśmierz A., Marcinkowski M., Lisowska-Mieszkowska E., Potapowicz I., Bidłasik M., Bielczyńska A., Bratkowski J., Kolada A., Ochocka A., Pasztaleniec A., Romańczak A., Sadowski M., Siwiec E., Legutko-Kobus P., 2023, *Trendy środowiskowe w kontekście Koncepcji Rozwoju Kraju 2050. Trendy krajowe*. IOŚ-PIB. Warsaw.

[34] Report by Sauli Niinistö (2024) Safer Together Strengthening Europe's Civilian and Military Preparedness and Readiness. p 22. Accessed 22.11.2024: https://commission.europa.eu/document/download/5bb2881f-9e29-42f2-8b77-8739b19d047c_en?filename=2024_Niinisto-report_Book_VF.pdf

According Paragraphs in the VASAB Vision 2040:

Patches represent a sustainable management of the commons where natural resources are in balance with human activities. They are understood as the blue and green commons of the Baltic Sea Region. They describe larger geographical areas which are important for ensuring a good quality of life, ecological livelihoods, sustainable production and resilient supplies in the Baltic Sea Region. Relevant sections in the VASAB Vision 2040: Introduction; paragraphs 17, 19, 23, 118-123 (Pearls, Patches).

Conclusion:

VASAB committee should strengthen the cooperation and dialog between members for ensuring food production and water supply.

3.6. Adaptation to the climate change in different territorial context and restoration of the environment

BSR communities and different types of territories are also threatened by the new types of risks related to climate change, accordingly to their vulnerability. These include, among others, the formation of heat islands in urban areas, floods, droughts, and the negative effects of storms and hurricanes, including coastal erosion. All of these challenges call for an effective response at different spatial levels including the local one. The wide climate adaptation and mitigation topics should not be neglected according to rapidly changing geopolitical context, on the contrary proper strategies and actions should be mainstreamed in the frame of all development policies, not only the environmental one, and take into consideration through the territorial lens.

Hazardous materials dumped in the Baltic Sea are also a problem (toxic warfare agents and their disintegration products, conventional weapons and wrecked fuel and oil substances, fuel and oil derivatives) [35] . This is an extremely complex and interdisciplinary issue and therefore requires multifaceted cooperation between many actors. Toxic materials in the Baltic Sea may affect also food security (fishing sector).

According Paragraphs in the VASAB Vision 2040:

A growing concern of environmental threat[36] that the use of aging vessels carrying enormous amounts of sanctioned Russian crude oil (the Russian shadow fleet) on the Baltic Sea carries. Common approach in the region around the Baltic Sea to tackle this issue is needed. Protecting our ports, coastline and the sea itself is our own responsibility that needs an urgent common solution. Relevant sections in the VASAB

[35] For the first time in 25 years of Interreg in the Baltic Sea Region, the participating countries in Summer 2023 have decided to launch a call for proposals on a specific topic at short notice. Background to this remarkable new approach is the momentum that this topic has gained, not least as a result of the decisions taken by the Council of the Baltic Sea States and the VASAB Conference of Ministers for Spatial Planning on 1 June 2023 on dumped munitions in the Baltic Sea.

[36] Braw. E. (2024). Russia's Shadow Tankers Threaten Baltic Environmental Catastrophe. View 03.10.2024: https://cepa.org/article/russias-shadow-tankers-threaten-baltic-environmental-catastrophe/

Vision 2040: paragraphs 67-76 (sustainable maritime transport, more efficient coordination and sea-basin cooperation to ensure maritime safety and safety in ports, the safety of navigation). Addressing risks associated with old and not always safe vessels transporting sanctioned Russian crude oil should be a regional priority.

3.7. Resilient Communities

Community-level resilience is crucial for civil protection, disaster preparedness and crisis response. The European Commission's 2023 disaster resilience goals stress public risk awareness and preparedness. Commission's communication indicates as one of the Union's disaster resilience goal the need to prepare: *Increasing risk awareness and preparedness of the population: A risk-aware and prepared population is a crucial component of disaster resilience because individuals and communities are often the first affected and the first to respond to disasters. Public awareness of risks and sufficient knowledge of how to prevent, prepare for and respond to disasters greatly reduce the negative consequences of disasters. It should increase public knowledge of disaster risks and prevention measures; improve individuals' and communities' self-protection, behaviour and preparedness to respond to disasters and foster a culture of risk prevention and trust in civil protection authorities.*[37]

An example from Estonia is the regular overview of settlements where preparedness is considered as part of a normal way of life by a city, town or a smaller settlement[38]. Building resilience centres is one example of how to proceed with citizen involvement. We should further develop our national plans related to shelter and evacuation by diminishing the lines between borders when it comes to conduct civil protection operations during the crisis. The bordering cities in our countries can enhance public and private cooperation by establishing resilience centres in local communities by sharing their practises and cooperating more to prepare for cross-border crises.

The concept of total defence has been rooted in Estonia, Finland, but also among other neighbours who believe in the clarity of roles among the society in crisis preparedness actions. It assumes that safe and secure environment is not only the obligation of an internal security provider in the region but also an asset that should be in the toolbox of every individual. Every worker in a local enterprise or local municipality needs to know their own role and responsibilities in case of a crisis.

Turning more attention to resilience factors of our small and medium-sized settlements and enhancing cross-border and regional cooperation between Pearls may be one of the 'incentives to stay'. That way service continuity or connectivity issues could be avoided or minimised in stormy seasons, which can attract smaller communities to stay

[37] COMMISSION RECOMMENDATION of 8 February 2023on Union disaster resilience goals(2023/C 56/01). Accessed 20.11.2024: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32023H0215(01)
[38] Crisis management overview of local authorities in Estonia. Accessed 04.10.2024: https://minuomavalitsus.ee/en/kov?service=16-2&year=2023

in their settlements, and not to move/avoid moving to larger centres. The EU Critical Entities Resilience (CER-directive) that gives minimum guidelines to important entities should be an example of good practise that could be applied as suggestions on other services as well.

Participation in local initiatives, such as volunteer rescue services or first aid training, builds both practical skills and a sense of belonging.

The United Nations' Sendai Framework for Disaster Risk Reduction[39] has advocated to *Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030*; as well as *Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030*[40]. Estonia's approach, which integrates preparedness into daily life and includes resilience centres could be considered as recommended solution for the BSR. Estonia conducts the regular overview of settlements under which preparedness is considered as part of a normal way of life by a city, town or a smaller settlement.[41]

The EU Critical Entities Resilience (CER-directive[42]) is another example of good practise how government can support resilience. The directive aims to reduce the vulnerabilities and strengthen the physical resilience of critical entities. These are entities providing vital services on which the livelihoods of EU citizens and the proper functioning of the internal market depend. They need to be able to prepare for, cope with, protect against, respond to and recover from natural disasters, terrorist threats, health emergencies or hybrid attacks.

Cross-border cooperation in civil protection should be enhanced, especially for cities near national borders. The concept of total defence, rooted in Estonia, Finland and other neighbouring countries, demonstrates the importance of clear roles and responsibilities in crisis preparedness.

According Paragraphs in the VASAB Vision 2040:

Developing spatial and operational community-level preparedness to successfully manage disruptions in everyday life should be addressed in the Baltic Sea Region's long term spatial vision. Relevant sections in the VASAB Vision 2040: Introduction; paragraphs 8-41 (Pearls). It should also be considered to create an additional layer on

[39]Sendai Monitor. Viewed 27.09.2024: https://sendaimonitor.undrr.org/
[40] Sendai Monitor. Implementing the Sendai Framework. Indicators. Viewed 27.09.2024: https://www.undrr.org/implementing-sendai-framework/monitoring-sendai-framework
[41] Crisis management overview of local authorities in Estonia. Accessed 04.10.2024: https://minuomavalitsus.ee/en/kov?service=16-2&year=2023
[42] DIRECTIVE (EU) 2022/2557 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 December 2022 on the resilience of critical entities and repealing Council Directive 2008/114/EC. Accessed 02.03.2025: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2557

the overall VASAB Vision 2040 map (page 7): 'resilient communities' or 'resilient settlements'. This should be an overarching layer, similar to 'good internet coverage'.

Integrating the concerns of community resilience in order to manage disruptions in everyday life into the next generation of the VASAB Vision 2040. Relevant sections in the VASAB Vision 2040: introduction; paragraphs 8-41 (Pearls). It should also be considered to create an additional layer on the overall VASAB Vision 2040 map (page 7): 'resilient communities' or 'resilient settlements'.

4. Conclusions

The evolving geopolitical landscape and growing environmental challenges demand a coordinated response in territorial development and spatial planning. Strengthening territorial/spatial/evolutionary/exaptive resilience in the BSR requires enhanced connectivity, energy and food security, climate adaptation, community engagement, civil protection and risk preparedness. Integrating these elements into the VASAB strategic documents and their implementation will ensure a resilient and future-proof region capable of navigating crises and safeguarding long-term prosperity.