

THE FUTURE OF MARITIME TRADE IN ESTONIA



**DEVELOPMENT SCENARIOS
UP TO 2040**



FORESIGHT CENTRE
2020

THE FUTURE OF MARITIME TRADE IN ESTONIA

Development Scenarios up to 2040 Summary

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Foreword

I remember that when I visited the Finnish National Technology Agency nearly ten years ago, I was very impressed that the Finns already had a national programme to prepare for the Arctic Ocean becoming more navigable and to take advantage of the business opportunities it offered. Their guiding principle was that it is never too early to prepare for the future.

The analysis of maritime trade scenarios that you are now reading is also a step towards early preparation for the future. The topic is broad as it covers possible changes in international multi-modal trade routes, changes in consumption and production near the routes that pass through Estonia, and the economic development of Estonia itself, especially the development of production. Possible tensions that could arise make matters more complicated, but the Estonian logistics sector has already learned to account for that.

The ports themselves hold only a few of the keys to how port trade develops. It could be better argued that the keys to the growth of port trade are held by the railway, or in a broader sense by the whole business and investment environment and how attractive that environment is to larger investment from industry or logistics.

However, the future is not simple and straightforward, and different trends in development can work against each other. Even if the international trade routes became more favourable for Estonia in the future, economic developments in Estonia and in other countries may reduce the demand for transport of unprocessed bulk products and increase it for the transport of more complex products that generally weigh less.

I hope this analysis will help you navigate among the trends that will shape the future of Estonian maritime trade and get an idea of where it may be wisest to invest and where maybe less so.

Happy reading!

Tea Danilov

Head of Foresight Centre





SUMMARY OF THE STUDY



The key factor for the trade volumes passing through Estonian ports in future will be where the goods come from and where they are going to. The goods that arrive in our ports are both our own exports and imports, and trade flows in the transport corridors that pass through Estonia.

- The trade flows fed by Estonia's exports and imports will continue to grow as the economy does so.
- The North-South trade flows in the transport corridors that pass through our ports will grow in future as the Rail Baltica route is built. This will help bring Finnish transit goods to our ports, and will also allow production and processing facilities to emerge near the new railway and create further added value.
- It is not likely that the East-West transit of energy goods will return to where it was in the 2000s. In the longer perspective, trade may benefit from a structural change in the economy of our Eastern neighbour, which will depend on the economic policy choices made there.

In the future scenarios, we discuss the factors that could most affect the volumes of trade passing through our ports:

- an increase in foreign investment and industrial production in Estonia as part of the trend for nearshoring, in which the investments of Western companies are returned from Asia to their home region;
- structural change in Russia's economy that would increase the share of industrial production in the economy and the resulting flows of trade through the ports on the eastern coast of the Baltic Sea.

Estonia has no control over such external developments. The best way for Estonia to benefit from the opportunities described in the future scenarios is to make sure it is a competitive place for production for both foreign and Estonian investors.

The coming decades will see several interesting developments in shipping, including:

- ships using new and less polluting fuels;
- self-navigating ships being used more widely.
 - The trend towards automation and digitalisation in maritime affairs is becoming increasingly important and will create opportunities for Estonia to use its strengths in ICT.



1. WHAT MAKES PORTS MORE OR LESS COMPETITIVE?



The competitiveness of ports has been described as four different layers that all complement each other:

- Geographical factors: how large the hinterland of the port is or the area whose trade flows the port serves.
- Port infrastructure: the lengths and draughts of the ships that can be received, together with the options for loading and unloading and the storage space available.
- Transport: the transport services that are provided in the port, its connections to other transport modalities like rail or roads, and its solutions for reloading.
- Logistics: how well the transport chain is joined into a whole and connected with the logistical organisation for goods that moves them from the supplier to the customer.

The strengths of the Estonian ports are their depth, generally ice-free conditions, good infrastructure, effective transport connections, and high quality services. However, there is strong competition with other ports in the region.

The key factor in the longer term will be the geography of trade and where goods go to and from, and how much of that trade moves through our ports.

Estonia itself is small, but the hinterland of the Estonian ports is larger than Estonia. If there were no political obstacles, Estonia would be perfectly positioned on the East-West route to serve the trade flows in the St Petersburg region and beyond.

Even now the transit trade is still a significant part of the turnover of our ports, though it has dropped considerably from its peak.

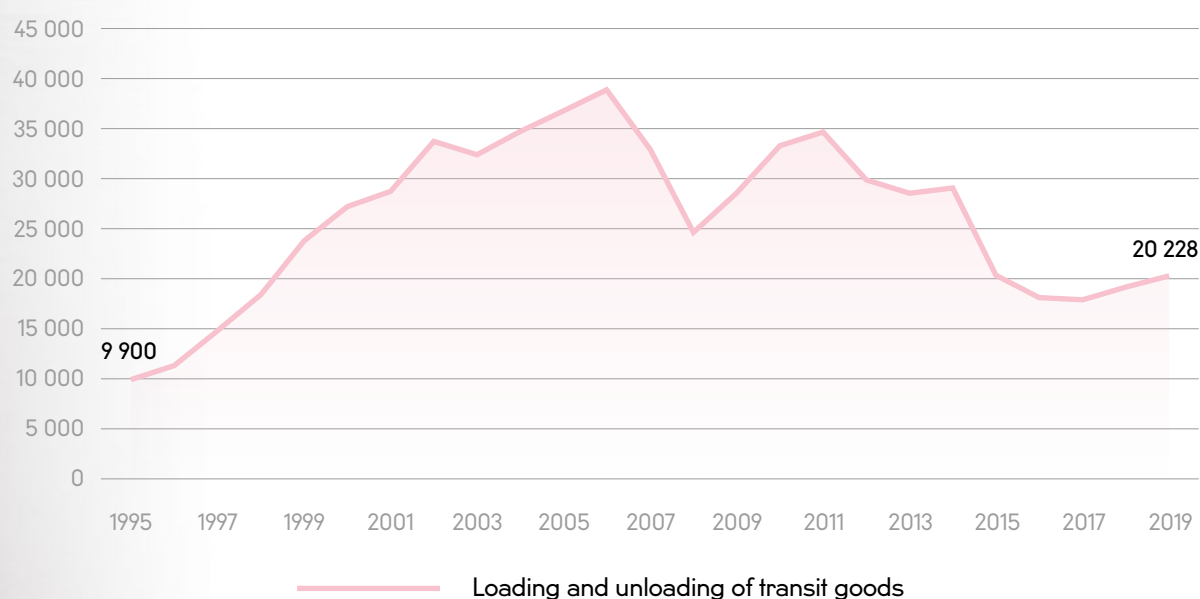


Figure 1. Transit trade through Estonian ports in 1995–2019

Source: Statistics Estonia

The transport of goods for Estonia's own exports and imports has grown constantly.

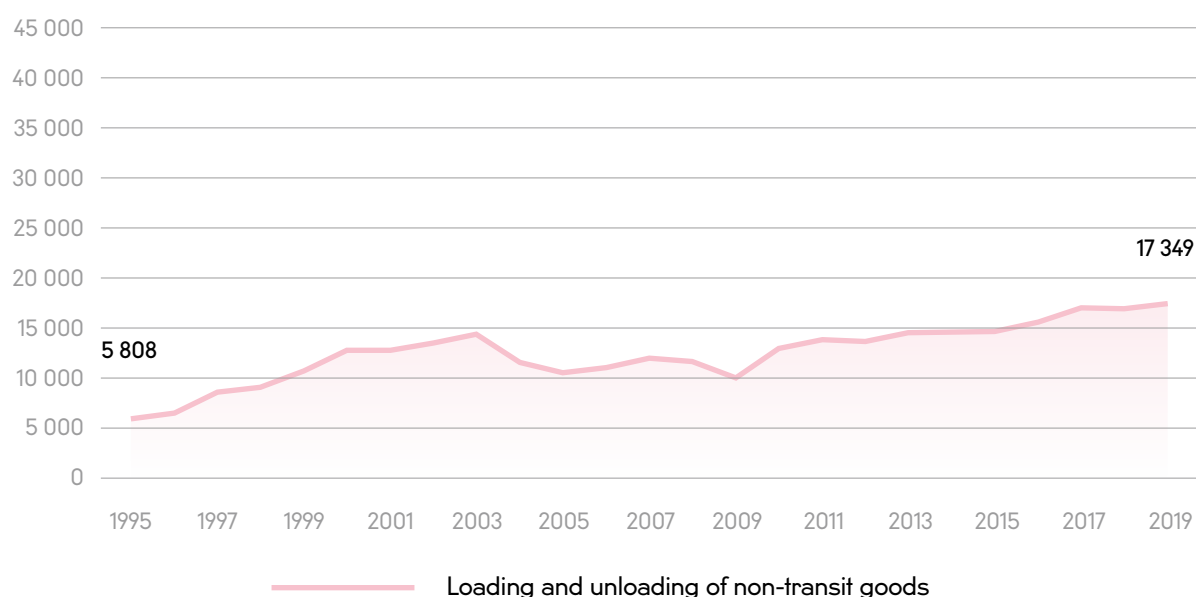


Figure 2. Non-transit trade through Estonian ports in 1995–2019

Sources: Statistics Estonia, authors' calculations

Alongside the East-West trade route, the North-South trade also flows.

How much of Finland's trade with southern countries will be carried by Rail Baltica remains a question for the future.

Two trends that have marked Estonian ports over the past two decades have been the rapid fall in East-West transit from its peak in 2008, and the constant growth in the transport of goods caused by the increase in Estonia's exports and imports. Although the trade flows from the growth in exports and imports have increased considerably, they have not compensated for the decline in the transit trade.

The flow of transit goods from Russia has not stopped totally, and even now, fertilisers, ammonia and oil products are transported to the west through the Estonian ports, and the Port of Sillamäe has become the country's largest transit port. The Port of Tallinn is the largest by the total volume of trade, and the Ports of Sillamäe and Tallinn together account for 84% of the trade turnover of the Estonian ports.

The Baltic ports of Russia have seen the fastest increase in trade turnover, and the Port of Ust-Luga has grown fastest. Russia's goal is to direct as much of its trade flows as possible through its own ports, and this has considerably increased their trade volumes.

Other ports on the eastern coast of the Baltic Sea have fared better than those of Estonia.

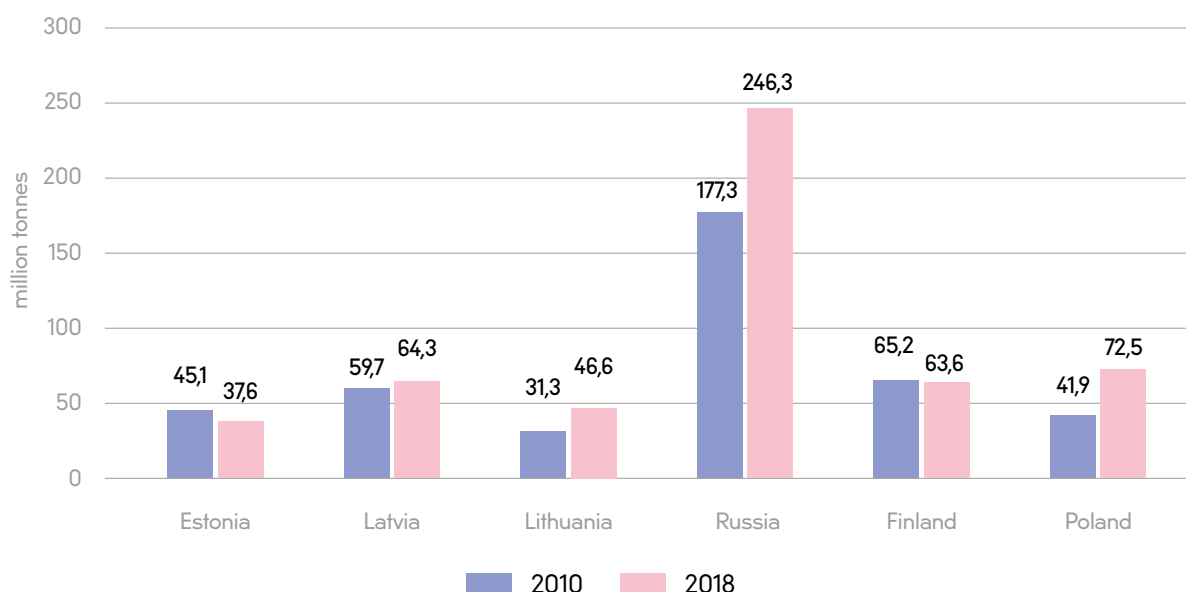


Figure 3. Trade volumes passing through the main ports on the eastern coast of the Baltic Sea, million tonnes, 2010 and 2018

Sources: Rosmorport, websites and annual reports of ports


The trade turnover of the ports of Klaipeda in Lithuania and Gdansk in Poland has also grown significantly. The trade turnover of Latvian ports has increased a little, while that of the Finnish ports has dropped. The largest decline from the level of 2010 has happened in Estonia.

Other ports on the eastern coast of the Baltic Sea have been more successful over the past decade at increasing their trade volumes than Estonian ports have. The decrease in the volume of trade in Estonia has resulted from the decrease in East-West transit, but the transport from Estonia's own exports and imports has increased considerably.



2. DEGLOBALISATION OF THE WORLD ECONOMY





The world economy will continue to grow but at slower rate, and its centre of gravity will shift towards Asia. China will soon become the largest economy in the world. Trade relations between the countries of the West and China are currently tense, and what form they take in future will be a crucial issue. It is not currently clear how economic relations will unfold in future. The more pessimistic vision is that the countries of Asia and those of the Western hemisphere will distance themselves from each other, becoming separate economic and technological spheres.

Although a total decoupling between Asia and the West is not likely, the trend of deglobalisation is still topical. It may threaten the prospects for intercontinental trade and cause changes in global supply chains. Even without confrontation between great powers, overcomplicated global supply chains can prove fragile in the face of unexpected shocks, and the political risks that may arise from countries becoming excessively economically dependent on each other have also risen up the agenda.

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The potential for deglobalisation contains both risks and opportunities for Estonia, as it will reduce Estonia's ability to profit from the intercontinental transport of goods, but at the same time could bring new investment and trade flows to our regional neighbourhood.

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3. CLIMATE CHANGE AND MEASURES TO COMBAT IT



The International Maritime Organization has set a target of reducing its emissions by at least 50% by 2050 from the level of 2008, and of ending emissions of greenhouse gases totally by the end of the 21st century. They are working on numerous solutions for reducing emissions, most importantly the introduction and use of new fuels.

We do not know yet what fuel ships will be using in 2040, but several strong candidates have been identified:

- Liquefied natural gas is considerably cleaner than ordinary ship fuel, but it is not totally free of CO₂ emissions. Several ships already work on gas, some of them in the Baltic Sea, and new bunkering facilities are being set up.
- The CO₂ emissions from methanol are similar to those from natural gas, but methanol is easier to handle and the existing diesel engines can be adapted to use it. However, producing methanol also creates emissions, which is a problem. To reduce total CO₂ emissions, methanol produced from biomass should be used, but this is more expensive.
- Hydrogen has emerged as one of the most serious future candidates for ship fuel that is genuinely non-polluting. Several problems must be solved before it can enter regular use though. Producing hydrogen causes CO₂ emissions, resulting in what is called grey hydrogen, or is expensive when green hydrogen is produced by electrolysis. Transporting hydro-

gen and developing bunkering infrastructure are also major challenges.

- Ammonia is easier to transport and use in motors, but as it is produced from hydrogen, it has the same problems of the emissions that arise during production as hydrogen does.
- Electric motors running on batteries could conceivably be used in short-distance maritime transport and ferries. There is an example of this in operation in Estonia, as the hybrid ferry Tõll uses electric motors fed by diesel generators and battery banks.

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All the climate-friendly ways of running ships that have so far been tried are more expensive than using ordinary ship fuel. It may be assumed that a gradual changeover to them will make maritime transport more expensive in the future than it is today. Whether it will make maritime transport less competitive in the future is another matter though. Road and rail transport also face the challenge of reducing emissions of greenhouse gases, and the problems that they will need to solve are certainly no smaller, so it is most probable that all forms of transport will become more expensive.

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4. AUTONOMOUS SHIPS



Not every ship sailing the sea in 2040 will carry a crew on board. Autonomous ships that are navigated from distance will have become common.

There will be different levels of autonomy:

- the ship has both an autonomous control system and a crew that can take over navigation if necessary;
- the ship has a crew, but is navigated remotely;
- the ship has no crew and is navigated remotely;
- the ship has a fully autonomous control system that is able to make navigation decisions independently.

Fewer employees will be needed, but they will need to be more highly skilled than before. Having fewer crew means there will be more room for goods. Safety of navigation will improve and the number of accidents will fall. The risks from piracy will be reduced.

There will be new problems of cyber security if simply hacking the ship's control system allows the ship to be taken over, its cargo to be diverted or an accident to be caused intentionally.

It is important for all the computer systems on the ship to be secure and protected against attacks. A new business of auditing and certifying the safety of naval IT systems will emerge in connection with navigation.

Although the introduction of autonomous ships may have little impact on the trade volumes passing through ports, such ships may create several opportunities for the Estonian naval economy. As cyber security becomes more important for shipping even beyond autonomous ships, Estonia will be well positioned to use its advantages in ICT capability. The maritime cybersecurity centre of TalTech may be expected to make an important contribution to this. Estonia's advantages are also that it has technologically advanced ports and is close to Finland, which is the leader in testing autonomous ships.

Japan has a target that by 2040, half of the ships sailing in Japanese coastal waters will be unmanned. Finland is also working on unmanned ships and has reserved the Jaakonmeri test area for testing unmanned navigation. The autonomous vessel NYMO developed by researchers from TalTech has been successfully tested in the coastal waters of Estonia.



5. CHANGING TRADE ROUTES



The Arctic Ocean Shipping Route

Climate change is opening up new opportunities in the Arctic for mining natural resources and for transporting goods by sea. In the future, goods will travel from China to Europe via the northern shipping route 10–13 days more quickly than they do through the Suez Canal.

There are however several downsides to this shipping route. Only more expensive ice class vessels can be used, the weather and climate are challenging, navigation is complicated, and costly ice-breaking is needed.

The Arctic Ocean shipping route would become important for Estonian maritime trade if the flows of goods moving along it started to pass through our ports. This would happen if ships arriving from China were to use Kirkenes in North Norway as their place of landing. From there, goods would move south by railway, then over the Gulf of Finland, or under it by tunnel, and by Rail Baltica to Europe.

However, it is doubtful that this will actually happen. It is not certain that goods arriving from the Arctic Ocean would be unloaded in Kirkenes instead of sailing around Scandinavia to a North Sea port or using the port of Murmansk.



Figure 4. The New Silk Road and the Arctic Ocean Shipping Route

Furthermore, Kirkenes currently has no connection with the Finnish railway network. It would take at least 15 years to build a rail link, and it is unlikely that it would be ready by 2040 if no decision to build it has yet been taken.

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If the Chinese trade coming through the Arctic Ocean started to move south over Finnish railways, it would contribute significantly to the trade turnover of our ports. However, any such development seems unlikely in the coming decades.

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The New Silk Road

Most of China's trade with Europe travels by sea, but not all of it. China's Belt and Road Initiative also includes the Eurasian Land Corridor or the "New Silk Road" economic route. The volume of goods moving through the Eurasian Land Corridor today is only a fraction of the total though. Rail transport is faster and more expensive than maritime transport, but slower and cheaper than air transport.

It is predicted that the trade volumes passing through the New Silk Road will increase five or ten times over in the coming decades. The inland regions of China that are far from its ports are developing and so the volume of goods produced there will increase, making the railway an attractive choice for transporting those goods. Investment in the infrastructure that will allow longer trains to be used will make transport more efficient and cheaper.

The final destinations of the Chinese goods transported by rail point to the pre-transport potential of the Baltic ports. Goods transported to Sweden currently go through Poland, Germany and Denmark, but a transport route through the ports on the eastern coast of the Baltic Sea would be much shorter. A possible alternative for the goods sent to the Nordic countries is to carry them on Russian railways to Estonia, from where they would be transported to Sweden by sea through the ports of Muuga or Paldiski. This would mean a considerable increase in the volume of container transport through the ports of Estonia and Sweden.

However, there are several problems with this project. The main one is that there will be competition between the ports on the eastern coast of the Baltic Sea as there are several alternatives to the ports of Estonia for the trade flows from China to the Nordic countries, and Russia occupies a good position among them. Kaliningrad has emerged as a strong candidate.

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Although their geographical location means that the Estonian ports would be well placed to service the trade flows from China to the Nordic countries by rail, current trends make it unlikely that this will actually happen.

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The Baltic-Adriatic Corridor

The change expected in multi-modal transport corridors over the next decades that will be most important for the trade volumes serviced by Estonian ports will probably be the extension of the Baltic-Adriatic Corridor into Estonia. The Rail Baltica railway would stretch the transport corridor that currently runs from the Adriatic ports to Gdansk to the Port of Muuga, improving the rail links from Central and Southern Europe to the Baltic states and Finland.

The Baltic-Adriatic Corridor should be viewed as part of a larger multi-modal corridor that offers Asian goods that enter the Mediterranean through the Suez Canal an alternative route to Northern Europe that avoids the extended shipping line through the Mediterranean into the ports of the North Sea. Rail transport is more expensive but faster by a week. It would not be the whole flow of trade from Asia that was redirected onto the railway, only the more time-sensitive goods within it.



Figure 5. The Baltic-Adriatic Corridor

The important factor for the trade volumes passing through Estonia's ports will be the volume of Finnish trade with Southern Europe, Turkey, India, and other Asian nations. Asian economies are set for remarkable growth over the coming decades, which in turn means increased purchasing power for consumers, more substantial and complex production, a greater need for different production inputs, growing exports, and an increased percentage of more expensive and specialised goods within the trade flows.

Various studies consider it a very real possibility that the future Baltic-Adriatic Corridor could use Rail Baltica to transport some 3.5–4 million tonnes of goods a year. In the initial phase, the bulk of the volume would probably come from South-Eastern and Central Europe, while trade with Asia could come to dominate later on.

The shipping potential of the Baltic-Adriatic Corridor is not limited to transit. It will certainly also carry a part of Estonia's exports and imports, which would shift from other transport modalities to the railway.

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The change in the transport corridors passing through our neighbourhood that will be most important for the port trade over the coming decades will be the extension of the Baltic-Adriatic Corridor to Tallinn when the Rail Baltica route is built.

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6. FUTURE SCENARIOS FOR MARITIME TRADE





What will the origin, destination and volume of the goods passing through Estonia's ports in the next twenty years be?

Future scenarios for maritime trade up to 2040

We have developed four scenarios out to 2040 to represent the possible trajectories along which the trade flows served by Estonia's ports could develop over the next twenty years. The scenarios are not forecasts as our aim is not to describe the most probable developments, but to discuss separate versions of the future, each of which has a different set of conditions under which the ports function. Following from the avenues for development in the global economy, international trade and shipping that we described earlier, we have selected two of the most important developments in the external environment that we believe could most impact the trade that passes through Estonia's ports, and we have used these as the main axes of the scenarios. Combining these axes creates a multifaceted vision of the future that can be used to outline the possible future worlds, and so to prepare us for what we might face ahead.

Framework of the Scenarios

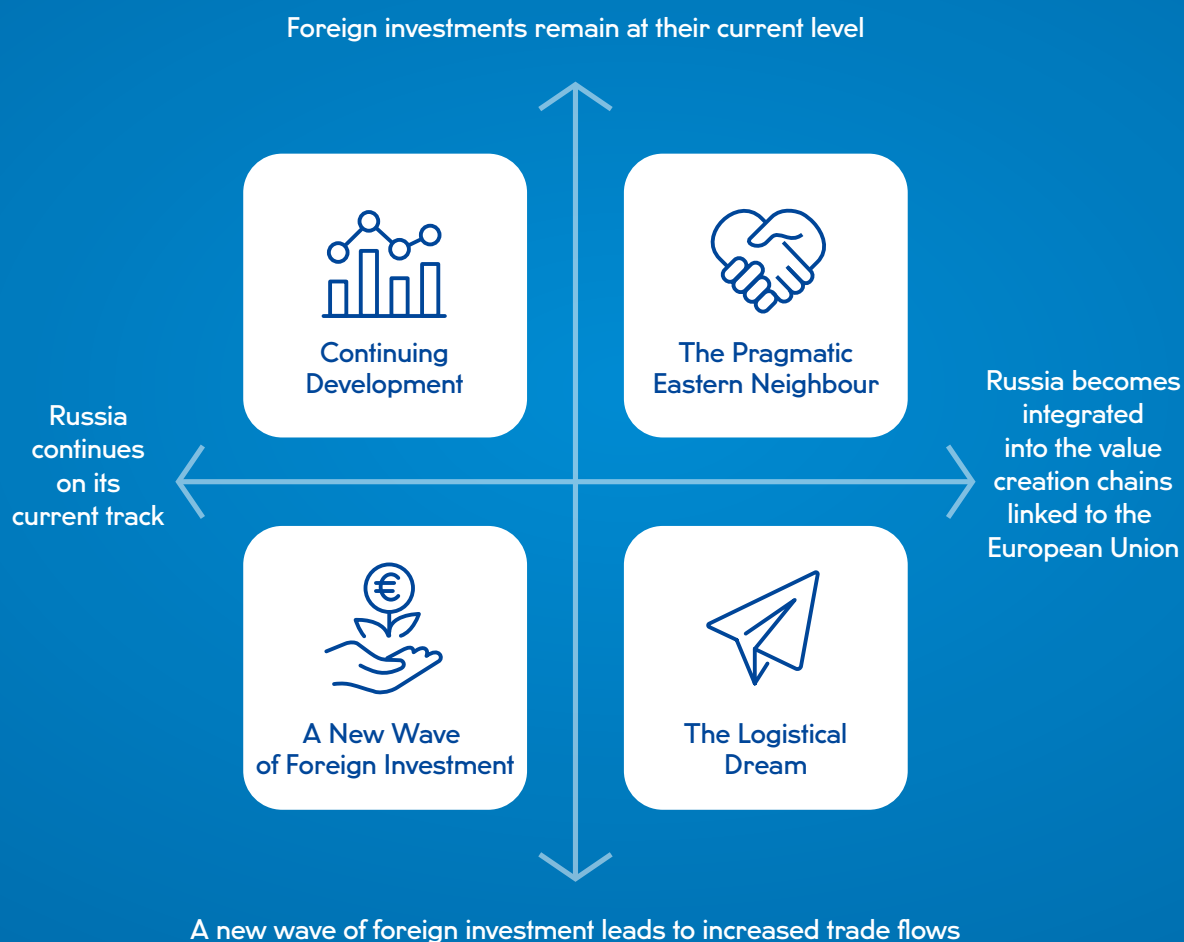


Figure 6. Framework of the future scenarios for maritime trade


Table 1. Description of the scenario axes

A modest level of foreign investment	A new wave of foreign investment	Russia continues on its current track	Russia becomes integrated into the value creation chains linked to the European Union
<ul style="list-style-type: none"> • No massive changes in the interest of foreign investors towards Estonia • Difficulties in maintaining the advantages of Estonia's investment environment because of a shrinking labour force, high costs and red tape • Investment mainly goes into buying up existing businesses and into ICT, which will not increase trade flows 	<ul style="list-style-type: none"> • The trend of deglobalisation becomes important as European businesses look for production facilities in their own neighbourhood • A new wave of foreign investment comes to Central and Eastern Europe, and Estonia is a potential target country • If the investment environment can be developed successfully, manufacturing could return to Estonia • Manufacturing will bring new trade flows, including those through ports 	<ul style="list-style-type: none"> • Russia's economy is oriented towards exports of energy • Growth in the Russian economy is modest • The Russian transit trade continues to be redirected to Russia's own ports 	<ul style="list-style-type: none"> • Russia carries out structural reforms and its investment environment improves • It targets development of industrial production with higher added value • Production is integrated into the value creation chains linked to the European Union; trade becomes more intensive as semi-finished goods are imported and finished products are exported • Some goods move through the Baltic ports



Scenario: Continuing Development



A blurred freight train moving along tracks at sunset. The train is composed of several yellow and white railcars, and the tracks are made of gravel and steel rails. The background shows a hazy sky with a warm orange glow from the setting sun.

Current trends continue both in foreign investment in Estonia and in the economic development of Russia.

Key points: expected developments in trade volumes continue, maritime trade continues to grow through Estonia's foreign trade, trade flows following the opening of Rail Baltica, and there is a risk of losing East-West transit.

In this scenario, we presume that **the volume of East-West transit declines or at best remains the same**, depending on whether Russia continues with its current policy of directing transit flows to its own ports. The volumes of the transit trade in timber and paper industry products, building materials, chemical products and similar **moving North-South** along the Rail Baltica **will gradually grow**. However, we assume that **stable growth will continue** in the transport of non-transit goods.

What would this stable growth mean for shipping? Simplifying Estonia's earlier experiences slightly suggests that the volume of shipping of **non-transit goods** will grow at the same pace as real gross domestic product. The economy will not grow as fast in the coming decades as it has so far, and the Ministry of Finance forecasts that economic growth will average 1.8% a year up to 2040. We expect the volume of non-transit

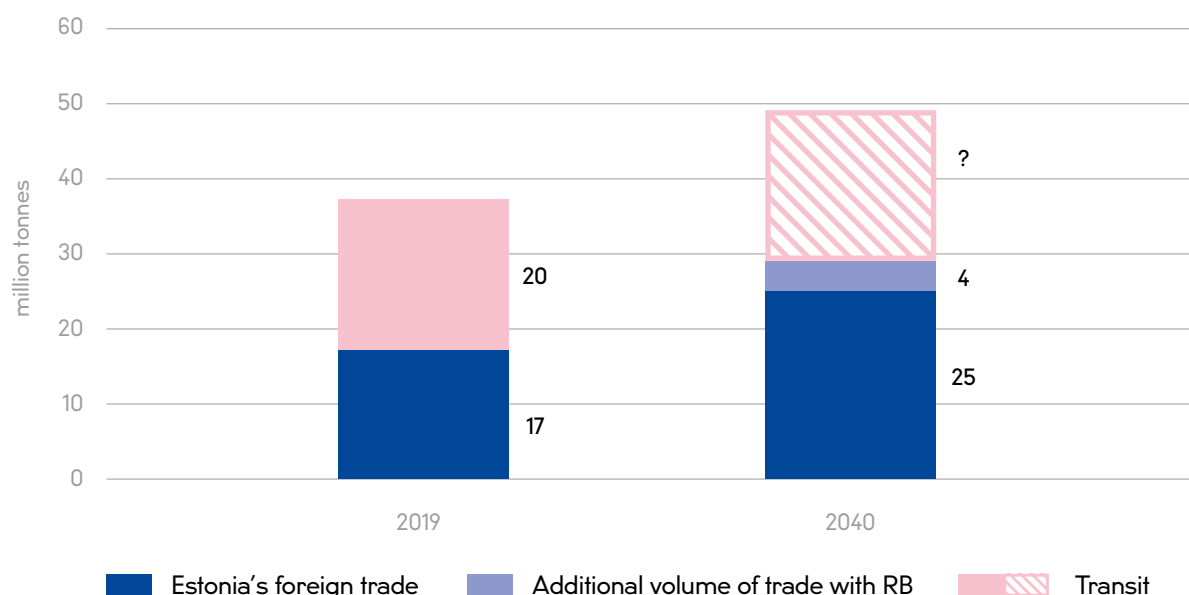


Figure 7. The projection for the trade volumes served by Estonias ports in the Continuing Development scenario in 2019 and 2040

goods to grow in the same way. This would mean **an increase in transport volumes by 2040 of around 8 million tonnes, or slightly over 40%**, from the current level of non-transit transport.

To take a conservative approach to East-West transit volumes, we should account for the risks from Russia's stated intention to direct the current transit trade of around 20 million tonnes into its own ports. We can expect the transit flows to continue in the near future, but in the long term Russian ports will develop their technological capability and capacity, and this threatens **to reduce our transit flows significantly** in the decades ahead.

The total volume of goods serviced by the ports depends largely on how Russian transit develops. Should it stop completely, the volumes of goods would be below their current level in 2040; should transit flows drop by half, the growth in the rest of the trade volume would be able to compensate. If we assume optimistically that the volume of Russian transit remains at its current level, we could hope to achieve the peak hit in

the record year 2006, when transport volumes reached nearly 50 million tonnes. This means that the capacity of the ports would not be a bottleneck holding back transport volumes in this scenario.

The risk of a decline in transit flows can be offset not only by increased Estonian imports and exports, but also by the new transit flows moving along Rail Baltica, which are predicted at 3.5–4 million tonnes, and the shipping volumes for the soy industry complex that is part of the current plans of the Port of Muuga.

The growth in trade volumes from Estonian exports and imports will continue, and the launch of Rail Baltica will support the trade in ports. However, the final total volume of cargo transported will depend largely on how East-West transit develops.

Opportunities



- + North-South transit flows are enhanced by the creation of Rail Baltica
- + Start of production intended to benefit from the Rail Baltica transport corridor

Risks



- A significant reduction in or disappearance of Russian transit flows
- Dematerialisation affects the volume of trade from Estonia's exports as increased refining of export goods increases their value but can lower their physical volume



Scenario: The Pragmatic Eastern Neighbour



Current trends in foreign investment continue as Russia's economy is modernised.

Key points: Russia's industry develops and integrates with the value chains of the European Union, production increases with greater added value, industrial production accelerates, and transport volumes for production inputs grow. In this scenario, we ask what needs to happen to increase East-West trade flows. There is only a very remote possibility that the transit of oil products will ever recover to earlier levels. What could replace these flows?

A possible vision is that Russia could acknowledge the need to integrate its production into global value chains, including those connected with the European Union, in order to promote economic progress and an improved standard of living, and it would take the steps needed for this in the shape of structural reforms. The reforms would need to improve the business environment by providing better ownership protection and security for foreign investors, making bureaucratic procedures more efficient, reducing corruption, and enhancing legal clarity.

Such reforms would increase foreign direct investment by Western companies in Russia, and create a transfer of knowledge, skills and technology that would affect domestically owned companies through spill-over effects. Russia would increase its exports to Europe as the output from processing industry, including interim commodities, would increase proportionally next to that of natural resources. **Trade within industries** would grow in importance in Russia's trade flows.

The boost to Russia's economic development would increase East-West trade flows. Some of these flows would pass through Russia's own

Baltic Sea ports and some through neighbouring countries.

In this scenario, the transit of oil products through the Baltic states would not be restored in its earlier form, but transport within industries and transport of industrial products and production inputs would increase. Estonia is well positioned to compete for the trade flows between the St Petersburg region and Europe, which could pass through Estonia via the ports, Rail Baltica, and the Russian-gauge railway.

Opportunities

- + The chance to serve the growing East-West trade flows

Risks

- Competition with ports in Russia and the other Baltic states, and also with rail and road corridors
- Political risks, as it remains to be seen how much the state would try to control the increasing trade volumes
- Shipping that is related to trade within industries might not compare in volume with the transit flows of oil products



Scenario: A New Wave of Foreign Investment



Key points: deglobalisation accompanies a partial shift of production from Asia to the European region, foreign direct investment goes into production, and Eastern European countries compete for foreign investment.

The multinational Nordic companies are monitoring how their supply chains function as a whole, and are constantly reviewing whether their past location choices are still justified. They are watching with concern the rapid increase in prices for labour and other production inputs in Asia, which is flanked by tensions in international relations and uncertainty about possible future customs and sanctions regimes. An increasing number of companies find that the advantages of Asia as a location for production are not sufficient to justify the long supply times and the uncertainty about the future. The development of robotisation and automation has also made labour costs less important in production and supports the return of production to the local region.

direct investment would also bring new maritime trade flows in semi-finished products and other production inputs, and also in exports of end products towards the Nordic countries.

Opportunities



- ## Risks



- 37



Scenario: The Logistical Dream



A new wave of foreign investment as Russia's economy modernises.

Key points: Russia develops industrially and becomes integrated in value chains connected with the European Union, production is partially relocated from Asia to the European region, and foreign direct investment arrives.

In this scenario, both the new wave of foreign investment and the integration of the Russian economy into Western value chains become reality.

European companies that are reshaping their supply chains by bringing production closer to home have chosen Estonia as their new location; Estonia has also been chosen for several large-scale investments. Well-served ports and the successful launch of Rail Baltica to schedule have helped make Estonia's value proposition very attractive. In the longer term, the East-West trade flows passing through Estonia will be affected by the accelerating economic development of our Eastern neighbour, its increasing participation in the value creation chains connected with the European Union, a pragmatic stance on economic relations, and improving legal certainty for foreign investments. Estonia's regular and smoothly flowing trade along both the East-West and the North-South axes has made Estonia more attractive as a base for production in the eyes of foreign investors, though Russia with its lower cost level is also a strong competitor as a target country for investment.

The competitive position of the Port of Tallinn in the logistical value chain is improving as the Muuga cargo terminal becomes an important distribution centre for both Scandinavia and North-Eastern Russia. Adding value to transit goods becomes a more important function.

Estonia's major ports are made more competitive by the introduction of innovative solutions for smart ports, more efficient information exchange for transport documentation, support for autonomous ships, and port community systems that manage communication between the port and its partners.

In this scenario, the increase in shipping volumes is supported both by foreign investment coming into Estonia, and by the development of trade within industries in Russia. The improved economic environment in Russia and its low cost level offer strong competition to Estonia as a target country for investment.

Opportunities

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- + Serving both East-West and North-South trade flows

Risks

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- Russia's improved investment environment makes it a strong competitor along with other East European countries to Estonia as a target country for foreign investment
- The transport of industrial produce and production inputs described in this scenario might not turn out to be enough in volume to impact the trade turnover of ports significantly, as the volume depends on the nature of production and varies by industry

Comparison of the Scenarios

Tabel 2. Comparison of the scenarios



	Continuing Development	The Pragmatic Eastern Neighbour	A New Wave of Foreign Investment	The Logistical Dream
Features of the scenario	Estonia's foreign trade grows gradually together with the economy. Rail Baltica brings in new trade volumes	Structural change in the Russian economy increases industrial production and trade with the West within industries. The resulting trade flows open up opportunities for the ports of the Baltic states	Deglobalisation, means that part of the production of Western companies shifts from Asia to the European region, which opens opportunities for production in the hinterland of Estonian ports	There is a new wave of foreign investment and a structural change in Russia's economy. Both East-West and North-South trade flows increase, each enhancing the other
Dominant trade flows	Estonia's exports and imports	East-West trade within industries	Estonia's own exports and imports, exports of products from foreign companies and imports of production inputs	Trade within industries in both directions
Issues waiting for a solution	Retaining and improving the competitiveness of the investment environment	Competition with other Baltic ports	The investment environment	Barriers to growth from skilled labour and infrastructure, competition with other Baltic Sea ports, the investment environment
Opportunities	Development of production, benefiting from Rail Baltica	Serving the growing trade flows within industries in Russia	Trade flows through ports as imports of semi-finished products and other production inputs, and exports of end products	The synergic effects of East-West and North-South transport corridors on trade flows
Risks	The disappearance of East-West transit	Competition with the transport corridors of other Baltic states, politicisation of trade flows	Competition for the location of production with other Central and Eastern European countries	Competition for the location of production with other Central and Eastern European countries, including Russia. Competition with the transport corridors of other Baltic states, politicisation of trade flows

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