



Port of Helsinki Development programme 2022

Development programme for the parts of the Port of Helsinki 2022

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1. Introduction

The development of traffic connections and port traffic is important for the business life and well-being of the Helsinki area. The Port of Helsinki supports this development by offering its customers – shipping companies, operators, exporters, importers and passengers – a functional and sufficient framework to manage foreign trade transport.

The Port of Helsinki and the Helsinki area have developed in interaction with each other, which has resulted in industrial and commercial activity being centred around import, export and logistics, more than on average. The economic impact of the Port of Helsinki is 5 % of Helsinki's GDP and the employment impact is 7 % of Helsinki's employed labour force.

The port is also the object of alternative land use needs, which is why the Port of Helsinki has an increasingly smaller area of land in its use, especially in the town centre. The location of the passenger terminals in the centre or very close to the centre is, however, one of the qualities that attract tourists to Helsinki. Ship passengers arriving in Helsinki arrive directly in the midst of Helsinki's services and attractions, and when departing, the passenger terminals in the centre are easily accessible. In order for shipping companies to be able to continue the maintenance and development of their connections and business, the Port of Helsinki must ensure that the port areas remaining in the city centre are utilised as effectively as possible.

The Development programme for the parts of the Port of Helsinki is intended to determine what kind of traffic is conducted in which part of the port and what development operations are required by the parts of the port. The programme timeframe is two-dimensional. Primarily, the port's policy is defined in detail for the coming ten years, in addition to which, the development operations for the parts of the port are defined at a broader level up to the year 2030.

In addition to the ferry traffic in the passenger harbours, the programme addresses cargo traffic and cruise traffic. The challenges that are involved in these are, however, lesser and will receive less attention in the programme. The development programme will not discuss the development of business or the operations of the organisation.

In addition to developing the port, fluent access to the port is an important requirement for managing and developing traffic. Vital and cost-efficient passenger ferry traffic is also connected to passenger car and cargo traffic, which both place their own demand on the traffic connections. The Port of Helsinki develops traffic connections in close cooperation with other agencies in the City of Helsinki and the Finnish Transport Agency.

2. Prognosis of market and demand development

The development of the amount of freight traffic in the Port of Helsinki has traditionally been in keeping with the development of the Finnish GDP. Additionally, developments in the amount of traffic are affected by the logistical route decisions of industry and the competitiveness of alternative transport routes. During the 2000s, the traffic between Helsinki and Tallinn has developed in a positive direction. The popularity of the route is estimated to continue due to the constant development of the Baltic transport route, economic development in Eastern European countries and the so-called EU "sulphur directive", which will take effect in 2015.

The growth in the amount of passenger traffic in the Port of Helsinki has previously been mainly based on the development of the shipping companies' transport and cruise services. In recent years, so-called need-based travel, such as commuting, work trips, business trips, purchasing visits or visiting relatives has increased. Passenger amounts have increased especially between Helsinki and Tallinn, but also on the new route between Helsinki and St. Petersburg. Growth is expected to continue in the future as well. As needs-based, in particular, work-related, travel increases, passenger car traffic will also increase.

As part of the development programme, the Port of Helsinki drafted a prognosis on the development of forms of traffic up to 2030. The central prognoses can be found in attachment 1.

2.1 Passenger and vehicle traffic

2.1.1 Tallinn traffic

The car ferry traffic between Finland and Estonia has increased steadily each year. This is due to the following, among other things: the competitive price level in Estonia and other Baltic countries, compared to Finland, labour force mobility, the economic integration of Finland and other Baltic countries, the EU membership and economic growth of the Baltic countries, and the improvements in land transport connections and the regularity of car ferry traffic, as well as an increase in capacity.

The following may pose a threat to the car ferry traffic: the significant difference in the standard of living (for the present) between Finland and Estonia, which may affect the permanent transfer of the labour force to Finland. On the other hand, Finland constantly needs an added labour force in the service industry, and the Baltic countries may be the answer. One of the threats is also the economic development and raised standard of living in Estonia and other Baltic countries, in which case, they will offer employment, especially in the building and service industries. The harmonisation of alcohol taxation within the EU would hinder the increase in passengers. In the future, one of the factors hindering growth may also be insufficient port and land transport route capacity.

Solutions may include increasing the use of Via Baltica, building the planned Rail Baltica and the overall increase in living standards in the Baltic countries that could affect tourism in Finland, as well. Also, the economic, industrial and technological development, as well as the traffic routes and logistic solutions of Eastern European countries, will affect traffic through the Baltic countries and Finland.

The increase in commuting and passenger cars and vans in ferry traffic has been significant. This has been enabled by the excellent connections offered by shipping companies, and some of it is also due to using the car in the destination, connected to need-based travel. Improved security, especially in the Baltic countries, has enabled an increase in travel based on the use of a car. By car, transporting goods is also easy. This development is estimated to continue on for some time.

Currently, approximately 7.3 million passengers and one million passenger cars travel between the Port of Helsinki and Tallinn annually. According to a report commissioned by the port, passenger traffic is estimated to increase to approximately 8.3 million passengers by the year 2022. Passenger car traffic, on the other hand, is estimated to increase to approximately 1.5 million cars by the year 2022.

2.1.2 Stockholm traffic

The Port of Helsinki Stockholm traffic has remained steady for decades. The traffic has been controlled by two shipping companies. Stockholm traffic is focused in the Katajanokka Terminal (Viking Line) and the South Harbour (Tallink Silja).

The future of the route, i.e. whether there will be more companies competing for the route and whether the market is large enough for two shipping companies, has been the subject of discussion for a long time. At the moment, there are no foreseeable changes in either direction.

The demand on the Stockholm route is expected to continue at 2.5 million passengers annually, until the year 2022. The annual amount of passenger cars is also expected to remain at the current total of, approximately, 100,000 cars.

2.1.3 St. Petersburg traffic

There have been efforts made to establish a permanent and regular shipping line between Helsinki and St. Petersburg since the mid-1980s. The St. Peter Line began in the spring of 2010 and has, so far, managed to establish its operations. Traffic between Helsinki and St. Petersburg began in April 2010, with one ship from the South Harbour, and in August 2011, the shipping company began operations traffic with another ship on the St. Petersburg - Helsinki - Mariehamn - Stockholm - Tallinn - St. Petersburg route. At the beginning of 2012, the company's entire traffic was transferred to its current location in the West Harbour.

The number of passenger on the St. Peter Line has increased steadily. Some of the growth is due to increased visits to the ship, but the demand for the trips has also been on the rise. Another central reason for the increase in volume has been the conditional visa exemption that applies to passengers from an EU country, who both arrive in St. Petersburg by ship and depart by ship.

If the discussed bilateral visa exemption between the EU and Russia comes into effect, the increase in passenger numbers may accelerate further. According to a rough estimate, the St. Petersburg connection would be used by over one million passengers by the year 2022. It is not believed that passenger car and van traffic will increase significantly.

2.1.4 Cruise traffic

Visits by international cruise ships have increased year by year, and in the year 2012, a total of 265 ships visited Helsinki. In terms of the regional effect of cruise traffic, the size of the cruise ships has been a more important factor than the number of visiting ships, with the number of passengers significantly increasing, compared to previous years. This has increased the impact of cruise traffic on the region's tourism.

Currently, nearly 0.4 million international cruise passengers visit Helsinki annually. Cruise traffic is expected to continue its moderate growth in the coming years, but the market share of the Port of Helsinki is not expected to increase significantly in the Baltic Sea, due to high shipping route fees in Finland. Cruise lines have also expressed their desire for unmissable experiences in Helsinki (so-called WOW factors). Cruise ships less than 230 metres long are located in the South Harbour or the Katajanokka Terminal, and larger ships in the Hernesaari Terminal or West Harbour. The building of Jätkäsaari will remove the cruise ship terminals in the West Harbour from use, and they will be replaced by

a new terminal in Hernesaari. This will result in fewer terminals that will be suitable for ships over 230 metres long, whose relative share of cruise ships is on the increase, especially during high season. This may affect Helsinki's market share negatively.

The turnover brought by cruise ships has covered the operating costs from the traffic in recent years, but it is not possible to fund investments with cruise traffic profits in the current model. If the Port of Helsinki intends to develop its turnaround passenger traffic, it needs terminals. According to a current assumption, the Port of Helsinki will not be in demand for turnaround port services. A moderate amount of ship visits can be managed with temporary solutions, but as the number of turnaround passengers increases significantly, the capitalisation of the terminal must be determined.

2.2 Cargo traffic

The development of various routes in cargo traffic is influenced by the development of costs and services in different routes. Shipping companies and service providers influence this significantly, but also international regulations and restrictions, such as the sulphur directive, which will take effect in 2015, will affect this.

According to various sources, it is believed that the sulphur directive will increase the costs of sea transport through the ports of Finland by 20 – 50 %. It is believed that this will improve the competitiveness of land transport routes momentarily, which will most likely mean an increase in the relative share of the Baltic and Swedish routes, at the expense of the direct route to Central Europe. This would benefit the Port of Helsinki, especially in terms of cargo traffic to Estonia, which is indeed expecting an increase due to this.

2.2.1 Tallinn traffic

The streams of goods in Tallinn traffic have increased steadily in recent years. The growth has been based on the EU memberships and economic growth of the Baltic countries, the development of economic integration between Estonia and Finland, the rapid growth in foreign trade between Finland and Eastern Europe, the development of Via Baltica, as well as the affordable cargo prices of the transport companies in the Baltic countries and Eastern Europe. The aforementioned factors, together, have given shipping companies an opportunity to increase their capacity. Fast passenger ferries, with the possibility of transporting cars and cargo, have proven to be the most competitive. The concept's advantages include speed, good frequency and cost- and environmental efficiency, in comparison to an operating model, whereupon cargo and goods are transported on different ships with the same level of service.

The threat to growth in Tallinn traffic is, to some extent, the insufficient capacity in the land areas that are controlled by the Port of Helsinki and the Port of Tallinn and the surrounding sea and land routes. The current capacity is insufficient during most popular arrival and departure times.

In 2011, the cargo traffic between Helsinki and Tallinn was 2.8 million tonnes and the amount of traffic is estimated to grow due to the sulphur directive, for example, up to over 4 million tonnes by the year 2022.

2.2.2 Stockholm traffic

Cargo traffic between Helsinki and Stockholm has remained stable for a long time. In 2011, the route transported 0.6 million tonnes of cargo and, according to the development prognosis, traffic will remain stable until the year 2022. The schedules of the route are deliberately based on passenger needs, which clearly diminishes the development of cargo traffic on passenger car ferries. Shipping companies have also invested in the capacity and modernisation of the passenger car ferries between Turku and Stockholm, which will probably adequately cater to cargo traffic demand for now.

2.2.3 St. Petersburg traffic

Cargo traffic between Helsinki and St. Petersburg began at the beginning of 2012. The amount of cargo traffic has remained small in spite of the efforts, and the route cannot expect any significant growth by the year 2022. This may be due to the passenger-friendly schedules and the speed and fluency of land transport between the countries. St. Petersburg also has some cargo traffic restrictions at its passenger harbours.

2.2.4 Other cargo traffic

The majority of goods traffic to the Port of Helsinki passes through Vuosaari Harbour, which offers an excellent opportunity to increase the amount of ships that do not primarily carry passengers. The Vuosaari Harbour offers excellent opportunities for cargo traffic and passenger traffic, mainly based on passenger car traffic on RoPax ships (ships loaded via a ramp that mainly carry cargo, but also passengers) that can carry up to 700 passengers per departure.

The Port of Helsinki Vuosaari unit cargo traffic is mainly directed towards Germany. In 2011, it accounted for 3.9 million tonnes. Other significant target countries included the Netherlands (800,000 t), Poland (490,000 t), Belgium (450,000 t), Denmark (400,000 t) and Great Britain (380,000 t).

The Vuosaari cargo traffic is expected to grow moderately in the coming years and follow the development of the Finnish GDP. In 2011, the Vuosaari cargo traffic amounted to 7.5 million tonnes and in 2022, it is estimated at 9.5 million tonnes.

2.3 The development of demand and competitiveness, based on the ship type

2.3.1 Passenger ferry traffic

Tallink Silja was the first shipping company to introduce a new kind of fast, steel-framed passenger shuttle ferry that can be used all year round to the Helsinki and Tallinn route. It replaced the traditional speed shuttles (aluminium-framed catamarans, monohulls or hydrofoils). The traditional shuttles could be used seasonally when there was no ice and the ships were typically quite susceptible to the weather. The passenger and car capacity was significantly lower than in the new ships, and they could not carry cargo. These fast passenger ferries have two separate car decks and are better suited for transporting cars and cargo than the old passenger ships. They are so fast that the trip between Helsinki and Tallinn only takes around two hours.

Fast passenger ferries are suitable for short and busy routes, such as traffic between Helsinki and Tallinn. They are reliable during the winter, as well. A large number of daily departures and precise schedules maintain the excellent level of service. The versatility of the ships' facilities (for passengers, vehicles and cargo) makes the ship type very competitive and enables a seasonal variation of the cargo. The ship type enables the transporting of passengers, cars and cargo on the same ship, which is more environmentally friendly than using several ships.

The greatest disadvantage of this type of ship is that the increased traffic causes congestion in the harbour area and in the harbour entry and exit routes. Fast passenger ferry traffic is estimated to increase in the future. However, its profitability is based on passenger and car traffic, which means that as a result of increased traffic and reaching the maximum capacity of the car deck, increases in cargo traffic between Helsinki and Tallinn are believed to mainly occur on cargo and RoPax ships on routes from Vuosaari from 2015.

2.3.2 Ro-Ro ferry traffic

Roll on - Roll off ferry traffic competitiveness in cargo traffic between Finland and ports in Central Europe is excellent and will also remain good in the future. The effect of the sulphur directive and the improvement of the road and rail network in the Baltic countries may divert some of the traffic through the Baltic countries.

In cargo traffic between Finland and Tallinn and Finland and Sweden, passenger ferry traffic will retain its good competitiveness, in comparison to RoRo ferry traffic. The increase in passenger and passenger car traffic, especially on the Helsinki-Tallinn route, leads to a maximum capacity, which means that it is believed that the growth in cargo traffic will focus on RoRo traffic towards the end of the 2010s.

In addition to RoRo traffic, we can categorise the so-called RoPax ship type (RoRo Passengers) that can also carry some passengers. Unlike passenger ferries, its concept is not based on passenger traffic. This ship type is widely used in traffic between Finland and Central Europe. Its use on shorter routes as well, such as between Finland and Tallinn and Finland and Sweden, will be possible in the coming years, when passenger ferries reach their full capacity. The Muuga harbour in Estonia is not currently able to start RoPax ships on its routes.

2.3.3 Train ferry traffic

One of the greatest problems in train ferry traffic is the substantial net weight of the carriages, which burdens the ship's cargo capacity, i.e. earning capacity. The investments (e.g. loading ramps) made to the harbour for the train ferry are expensive. The loading of train carriages on different decks in a ship is slow, as lift solutions are the only option to move carriages from deck to deck, which leads to the ship's slow turnaround time in the port. At this time, Finland does not have traffic that would run between a location outside the port area and the port as a complete train. This is probably because cargo flows are transported into different directions after arriving at the port. The train ferry carriages should be loaded and unloaded in the harbour, which would reduce the concept's advantages.

The most realistic option, in terms of train ferry traffic, is probably a route between Helsinki and Tallinn, where the train would continue directly to locations in Central Europe. At this time, the track gauge poses a problem.

Train ferry traffic is not considered to be an option for the future, as it is not very transport- or eco-efficient.

2.3.4 Container ship traffic

Container ship traffic has traditionally been deep sea traffic across oceans. In these cases, the containers have mainly imported consumables from the Far East and exported Finnish goods across oceans. In recent years, so-called short sea traffic, i.e. container traffic within Europe, has become more common. It is expected to continue growing moderately until the year 2022, especially in terms of traffic between Central Europe and Finland; container ship traffic on shorter sea routes, on the other hand, is not expected to grow. Overall, it is believed that container ship traffic will continue its steady, moderate increase. The growth is based on the Port of Helsinki maintaining its strong position, growth in Finnish foreign trade, as well as cargo traffic increasingly moving to unitized cargo.

3. Port-specific examination



The Port of Helsinki has four parts of the harbour in general use. Of these, Vuosaari Harbour is located at the end of the ring road (Kehä III), along excellent connections. There are also no residential areas close to the port area, so the harbour offers excellent prerequisites for the development of cargo traffic. The West Harbour, South Harbour and Katajanokka Harbour, on the other hand, are located near the city centre, where there is housing close by.

3.1 Katajanokka Harbour



At the moment, Katajanokka is the harbour for Stockholm and Tallinn passenger ferry traffic, as well as cruise ship traffic. In 2011, 2.8 million passengers and 0.8 million tonnes of itemised cargo passed through Katajanokka.

The draught of the sea route is 7.9 m and 9.3 m in the cruise harbour. The Kustaanmiekka straits limit the length of the ships to 230 metres. The route capacity is 4 ships per hour. There are two ferry lots, in addition to 600 m of other piers. The capacity of the Katajanokka Terminal is 15,000 passengers daily. The field capacity of 5,800 lane meters should also be suffice for an increase in cargo traffic. Three passenger ferries use the terminal daily in the morning, afternoon and evening. The unloading of vehicles onto the street network causes only slight congestion on Sörnäisten rantatie during the afternoon rush hour. Port traffic does not burden the street network between noon and 9 p.m.

As far as the port is concerned, by optimising passenger ferry departure times, the departures from Katajanokka could be increased significantly, if not doubled.

3.2 South Harbour



The South Harbour is used for Stockholm passenger ferry traffic, as well as high-speed vessel traffic to Tallinn. In 2011, 2.0 million passengers and 0.3 million tonnes of itemised cargo travelled through South Harbour.

Olympia Terminal and the Katajanokka Terminal share a sea route. The draught of the route is 7.3 m. The Kustaanmiekka route limits the length of the ships to 230 metres. There are three lots for ferries, in addition to which, the area has a harbour for high-speed vessel traffic. There are two passenger terminals and their daily capacity is 20,000 passengers. The field capacity is 2,000 lane metres, which could cater to more traffic than now. The capacity of the street network leading to South Harbour is challenging to cargo traffic primarily around the Kauppatori market place. The Stockholm ship arrives in the morning and leaves late in the afternoon. The unloading of vehicles causes short-term congestion around Kauppatori and Sörnäisten rantatie. Port traffic does not cause congestion to the street network at all between noon and 9 p.m.

As far as the port is concerned, by optimising passenger ferry departure times, the departures from South Harbour could be increased significantly, if not doubled. Increasing the number of cargo ship departures should be considered carefully, due to the congestion on the street network.

3.3 West Harbour



Tallinn and St. Petersburg passenger ferry traffic and cruise ships (Hernesaari) use the West Harbour. In 2011, there were 5.2 million passengers and 1.6 million tonnes of itemised cargo.

The draught of the sea route is 11 m and the capacity of West Harbour is three ships per hour. Ten ships visit the harbour daily. Port traffic causes a moderately steady burden on Mechelininkatu and Länsiväylä, due to the port's busy ship visit schedule. Near Länsilinkki, approximately 10 % of the traffic on Mechelininkatu is caused by the port. During the unloading of ships, Tyynenmerenkatu and Mechelininkatu are congested in particular.

The capacity of West Harbour is approximately 25,000 passengers daily, which is nearly at a maximum during the busiest days. Field and docking areas are going to go through changes in the coming years, as the Jätkäsaari area is being rebuilt for new uses.

When the West Harbour extension is completed in 2013, the area will gain more docking areas and space. The West Harbour is, indeed, the best part of the port to increase capacity for the needs of the increasing passenger ferry traffic. The West Harbour is, indeed, going to see significant investments between the years 2013 and 2016. In order to utilise all the potential in the West Harbour, the transmissibility of the street network should be developed as well.

3.4 Vuosaari Harbour



Vuosaari Harbour was commissioned in November 2008. The harbour is the central port for cargo traffic. In 2011, 7.5 million tonnes of itemised cargo and 0.3 million passengers travelled through the Vuosaari Harbour. Passengers travel on RoPax ships.

The draught of the sea route is 11 m and the capacity of the route is four ships per hour. There are 17 ferry lots and 1.5 km of other piers. The field capacity is sufficient for developing cargo traffic. Land transport connections are good.

The Vuosaari Harbour is still focused on cargo traffic. Its capacity is sufficient for this decade and even the following decade in terms of itemised cargo. There are plans to deepen the sea route, to enable the ever larger container ships on the Baltic Sea to be able to access Vuosaari.

4. Use of parts of the port until the year 2022

The development of traffic connections is important in terms of the welfare of the Helsinki region and its economy, and the Port of Helsinki strives to promote this development by offering its customers an opportunity to develop traffic connections from their own starting points. In practice, this means that The Port of Helsinki does not plan any measures that would restrict its customers' operational preconditions.

According to an estimated growth in passenger ferry traffic, the utilisation rate of port parts located especially near the city centre will be high in the coming years. The planned investments in the West Harbour must also be implemented, in order to ensure that the Port of Helsinki's capacity is at a sufficient level until the year 2030.

The Port of Helsinki will need the use of all its present port areas in the future. The most important thing is, however, the sufficiency of capacity, and the streamlining the use of

some parts of the port is, indeed, possible by introducing other operations in them, bearing in mind that the Port of Helsinki still has the use of corresponding capacity, and that the use of the area does not hinder fluent port activities. The utilisation of South Harbour and Katajanokka Harbour, for example, could be improved. The Port of Helsinki will take an active part in the development of its areas.

4.1 Katajanokka

From the point of view of the Katajanokka passenger harbour, the number of passenger ferry departures could be increased significantly, even nearly doubled from the present, by optimising the arrival and departure schedules. Due to the location of the Katajanokka harbour and the transmissibility of the street network, the congestion that is caused by harbour traffic should be avoided during rush hour.

The number of departures from Katajanokka is going to be increased, if customers have the need. This applies to the first part of the period in particular (until the year 2018), when the new capacity of the West Harbour will not be available. The planning period aims to avoid street network burdening during morning and afternoon rush hours, by means of scheduling and other measures, especially, in terms of cargo traffic.

Katajanokka also serves summertime international cruise traffic for cruise ships that are less than 230 m long.

4.2 South Harbour

In the future, the South Harbour will be used primarily for passenger ferry and high-speed vessel traffic, in addition to cruise ship traffic. The South Harbour will remain a necessary area for passenger traffic in the future as well and its use as a passenger harbour must be secured.

Development measures for the Kauppatori area in the South Harbour area and its surroundings could be conducted in the form of the Kirjava satama ideas competition, for example, and, thus, create opportunities for other activities, as well, if port activities enable them. There are no plans to increase the number of cargo ship visits from the present in South Harbour, because congestion on the street network is to be avoided around Kauppatori.

4.3 West Harbour

In terms of passenger traffic, West Harbour is the best option for increasing capacity and the amount of traffic. During the planning period, West Harbour mostly caters to Tallinn passenger traffic, St. Petersburg traffic and regular cruise traffic on the Baltic.

The traffic in West harbour comprises passenger, passenger car and cargo traffic. Growth is expected to continue for passenger and passenger car traffic significantly. In 2011, approximately 5.2 million passengers and approximately 800,000 passenger cars travelled through West Harbour. It is estimated that in 2022, approximately 7 million passengers and approximately 1.2 passenger cars will travel through West Harbour. Bus traffic is also expected to increase from the current 18,000 buses to approximately 25,000 buses. In addition to car traffic, the increasing number of passengers increases the amount of traffic from escorting people to the ships.

Cargo traffic is expected to continue increasing in the West Harbour for a few years. As the number of passenger cars on passenger ferries in the West Harbour reaches its capacity, the increase in Tallinn cargo traffic is believed to focus on the Vuosaari – Muuga and Vuosaari – Vanhasatama route. In 2011, approximately 160,000 cargo items travelled through West Harbour, and in 2012, the number is expected to be approximately 190,000 cargo items. In 2022, the number is expected to reach approximately 240,000 cargo units.

The development plan for West Harbour will be continued as project planning, based on the Järkäsaari partial master plan approved by the Helsinki city council (2006) and the future West harbour detailed city plan. The Port of Helsinki intends to increase the capacity of the West Harbour, mostly in terms of passenger ferry traffic, and West harbour will indeed receive a new terminal with docks, parking and field areas. A passenger harbour requires better land transport connections to the city and beyond. Improving the draught is also necessary in order to achieve a sufficient volume of traffic.

Once the planned investments in the West Harbour have been completed, the capacity of West harbour will double to 10 million passengers and, approximately, 300,000 cargo items.

The harbour development will be implemented without disturbing the port activities and simultaneously with housing and office building construction in the West Harbour.

In addition to developing the West Harbour area, it is necessary that the Port of Helsinki collaborates with other agencies in the City of Helsinki, to ensure the transmissibility of the street and traffic network. The current network will not be sufficient for the increase in West Harbour traffic in the planning period. In the future, the street and traffic network will not only be used as a route between West Harbour and Helsinki and the metropolitan area, but one of the main routes between Finland and Estonia.

In terms of international cruise traffic, the Port of Helsinki will participate in the development of Hernesaari.

4.4 Vuosaari Harbour

Vuosaari will be developed as a harbour for cargo traffic and ships that mainly transport cargo. The port strives to develop passenger traffic, based on passenger car traffic and passenger harbour services, together with shipping companies. In the planning period (until the year 2030), however, no new investments are intended for the Vuosaari passenger terminal.

The Port of Helsinki will be collaborating with shipping companies to increase connections on the Vuosaari-Muuga route. These measures are not primarily based on traffic restrictions or different pricing in different parts of the port, but the starting point is to find solutions that will improve the operational preconditions of the Vuosaari-Muuga connection.

As the size of container ships on the Baltic is increasing, the Vuosaari harbour draught must be deepened. This measure would also enable more efficient energy management, if Helsinki Energia builds a new power plant, based on renewable energy sources, in connection to the Vuosaari Harbour. If the power plant is built, Vuosaari Harbour will also receive new dock, conveyor, field and storage solutions.

In the future, the Port of Helsinki will be in active cooperation with operators and its customers, in order to strengthen Vuosaari's position as Finland's primary foreign trade harbour. This cooperation can manifest in measures that are related to area development, harbour construction and other investments.

In drafting the detailed city plan for the eastern archipelago, the future needs of the Vuosaari harbour must be taken into account in order to develop harbour operations.

5. Operational development

The probable development of the Port of Helsinki cargo and passenger traffic until the year 2030 has been discussed above, in addition to the Port of Helsinki, definitions of policy on how the port should be developed in order to manage traffic, and in what areas traffic management would be most appropriate.

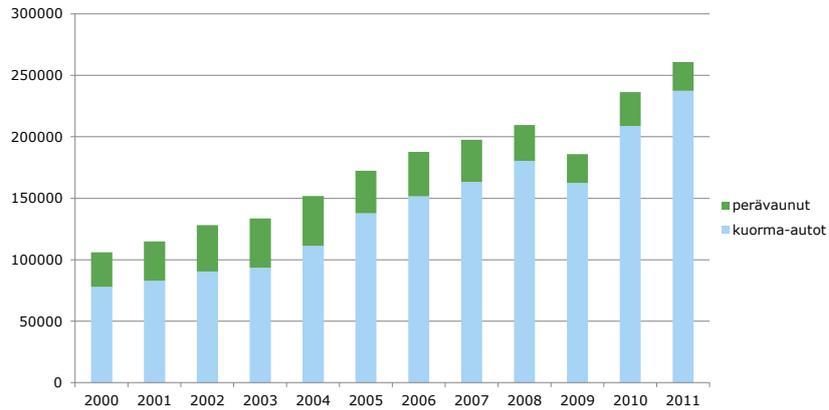
In addition to the policies discussed, there are possibilities related to technology and the level of services that would make managing traffic more economical, effective and environmentally friendly.

The strategic goal of the Port of Helsinki is to utilise automation in the operations that will benefit the customers and parties operatively responsible for operations by using automation. The implemented automation solutions can be connected to operations, such as handling shipping documents, managing waiting areas outside the city centre, gate operations, mooring and removing vessels, and administrating tickets.

As the responsible party for the port environment, the Port of Helsinki promotes environmental responsibility in its port operations. The passenger harbours in Helsinki are located in the city centre, where other operations of the city must be taken into account and the distractions from the harbour minimised. This issue has seen significant steps forward in recent years and it will also be under review in the future. The noise level of the ships will be paid attention to and in order to reduce the inconveniences, we will be using shore-side electricity and structures that are suited to noise abatement, among others. We will also be developing innovative fuel solutions, in collaboration with various parties.

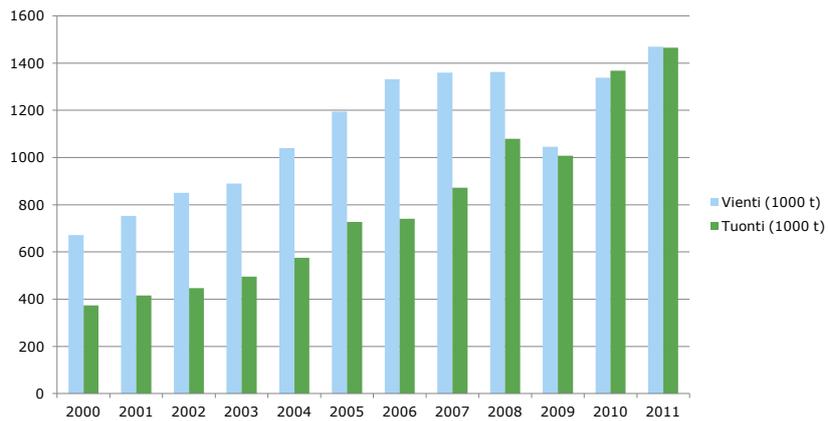
There will also be active development measures with shipping companies, which will give us the opportunity to affect the amount of inconveniences that are caused by traffic and ships, etc.

HELSINKI - TALLINN, LORRY AND TRAILER TRAFFIC, VEHICLES



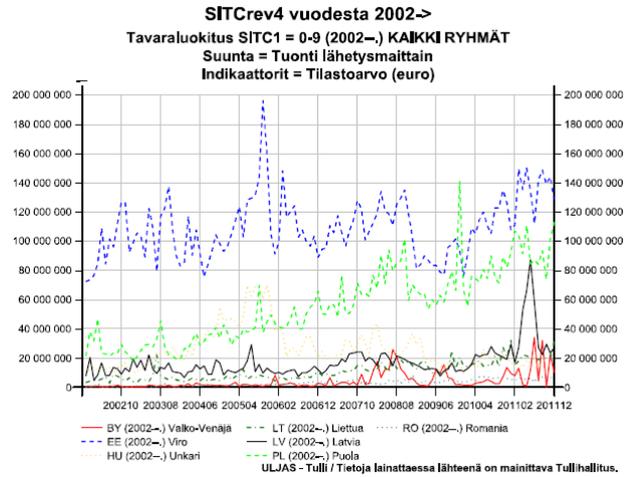
RAMBOLL

HELSINKI - TALLINN, LORRY AND TRAILER TRAFFIC, TONS

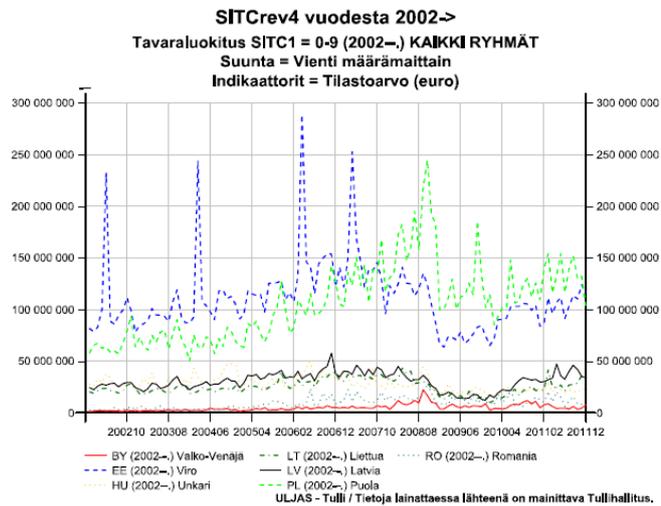


RAMBOLL

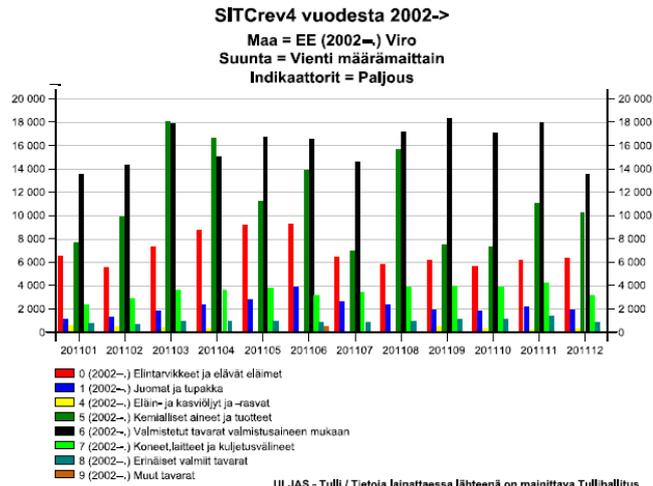
IMPORT BY SEA FROM EAST EUROPEAN COUNTRIES, EUROS IN 2002-2011



EXPORT BY SEA TO EAST EUROPEAN COUNTRIES, EUROS IN 2002-2011

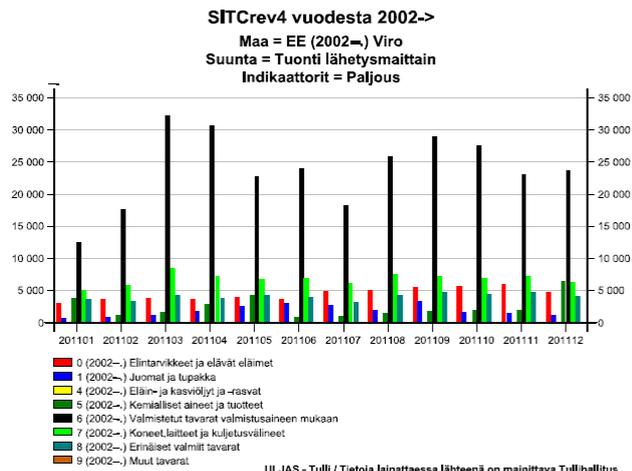


FINNISH EXPORT TO ESTONIA IN 2002-2011 TONS



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ESTONIAN EXPORT TO FINLAND IN 2002-2011 TONS



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HELSINKI – TALLINN, BACKGROUND FOR THE GROWTH IN TRANSPORTS

- Economic growth in Baltic countries and their membership in EU
- Economic integration between Finland and Estonia
- Growth in trade between Finland and Eastern Europe, specially Poland
- Dense ferry connections between Helsinki and Tallinn
- Success in shipping business
- Development of Via Baltica
- Price worthy transport costs

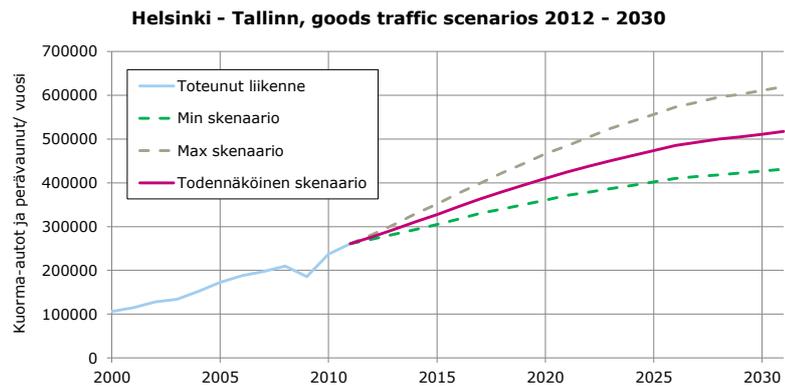
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HELSINKI-TALLINN TRANSPORTS, GROWTH

HELSINKI-TALLINN, SCENARIOS IN GOODS TRAFFIC IN 2012-2030

group
Econo
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Econo
Europ
Centra
Growt
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Intern
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Devel
Devel

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HELSINKI-TALLINN, SCENARIOS IN GOODS TRAFFIC IN 2012-2030

