



LOGISTICS CENTRE IN SEINÄJOKI AS A FOCAL POINT FOR THE FOOD INDUSTRY

Sub-project for Necl II

Development organisations
Regional Development Centre for the Seinäjoki region
The Regional Council of South Ostrobothnia

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1. Background

The development of the Seinäjoki logistics centre is part of a wider Necl project. The logistics centre in Seinäjoki can serve as a model for the whole Necl project. In particular the food industry companies and the logistics centres supporting their operations have developed methods that benefit all the logistics service solutions in Seinäjoki. The starting point for the next stage of the whole logistics centre is to increase the motivation of companies. The correct choice of assignments increases enthusiasm. Special assignments include logistics and links to central firms. A company marketing its products is looking for precisely these services. The future shape of progress cannot be predicted yet. There are several options. What is essential at this point is for the pioneers of logistics in Southern Ostrobothnia to have their voices heard. Several issues need to be solved. By no means are companies merely passive users of the logistics centre.

The most essential background information is the report concerning the flow of goods for the food industry. It is important to get information about the amount of goods being delivered to Helsinki, Oulu and Jakobstad along with the return loads in order to assess the correct situation. Analysing the stream of goods to and from Russia is also an essential target.

2. Difficulty of presenting the idea

The whole model of thinking is new. A new idea, particularly one operating at the interfaces of organisations, is always bound to create prejudices. The idea was well understood by Ove Grandell, the head of Närpes Grönsaker (Närpiön vihannes). Tuoretie Oy went instantly looking for their role in the development of the logistics centre. For the marketing purposes of the logistics centre it is good if there is a logistics company actively involved from the start. This way its clients are naturally involved.

2.1. Strategy developers have key roles

The aim is to crystallise the idea into a few clearly comparable commercial variables. The idea is presented to strategy developers at different companies. At Atria, these matters belong to Juha Gröhn, CEO & President of Atria Plc, and Mika Ala-Fossi, Managing Director of Atria Finland Ltd At Valio, you should approach Antti Tukeva, CEO of Osuuskunta Maitosuomi, operating in Seinäjoki. During the next stage, you can approach Valio's logistics director Thomas Backlund in addition to Tukeva.

3. Railway transport as a new centralised service

The strength of the logistics centre in Seinäjoki is that the area provides railway connections in all main directions. The east-westerly direction will be improved during the Necl II project. A functional connection between road traffic and railway traffic for the food industry is extremely challenging due to the demands of the cold chain. One of the central development aims is to have a company that leases out and stores refrigerated containers.

3.1. Loading and time

Strong forklift trucks have to be acquired to facilitate quick loading. Cargo space (containers and trailers) must be loaded at speed. The schedule is reasonable for Atria, if the departure from Seinäjoki is at 6 p.m., loading per cargo space 2-3 minutes and arrival in Helsinki at 10 p.m. The following schedule has also been discussed: departure from Seinäjoki at 10 p.m. and arrival in Helsinki at 3 a.m. the following morning. In the future, companies may have direct tracks to the logistics centre in Seinäjoki.

3.2. Profitability of the investment

For Osrobothnian industry, it is important to analyse the link between Seinäjoki and Vuosaari. The repayment for the investment in Seinäjoki's inland port must be aided by charges for the handling of goods along with the port charges. If this is not possible, the investment is unprofitable in this respect.

3.3. Systematic progress

Systematic progress can be started by analysing the potential volumes of food supplies to be transported by rail. It is best to start the calculations with the service needs of Atria, Valio and Närpes Grönsaker (Närpiön Vihannes). The volumes from these three companies are so significant that they are a good foundation to build on.

The second stage includes comparing the price competitiveness of the planned solution with the current model. The time saving compared to the current transport by road is going to be relevant. Time saving is especially important for deliveries of fresh produce.

Driving time is an essential variable as the transport method changes. The availability of drivers has been an issue for many transport companies. Another essential question is whether the new model helps with this problem as well. Will the model lead to tightened monitoring of driving times?

Carriage, container and trailer equipment also incur expenses. The handling of containers and trailers requires equipment and a workforce both in Seinäjoki and in Helsinki. Transports to Helsinki are the most essential and so their effects are worth analysing at the start.

After the whole chain has materialised, a rough proposal for an operations model can be made.

4. Strength of the food industry in the area

The strength within the food industry in Southern Ostrobothnia is built on Atria, Valio, vegetable wholesalers, and emerging small local food producers. It is statistically surprising that the national transport ratio of dairy products / vegetables /meat and fish is 4/3/2. What is most surprising is the significant share for vegetables. Thanks to Atria, the ratios are slightly different in Southern Ostrobothnia. In any case, the transport of vegetables from our area is significant, approximately 40 million kilos in total.

5. Centre for logistics operators

An excellent idea would be to gather as many strong logistics operators as possible into the Roves area. The most challenging stage of development is starting extensive cooperation in the area. The benefits of networked business must be brought into practice. The only option for cooperation is a common goal that is commercially significant for all parties.

6. Challenges of networking

Shared transports for the Seinäjoki region is a concept that already contains the starting points for cooperation. The minimum requirement is for everyone to have functioning cooperation with and connections to VR, the national railway operator. A more difficult question is whether VR is capable of smooth cooperation. There may, at some point, be other operators for railway transport.

The operations of the logistics centre consist of different assignments. The aim is to define the providers for various assignments and the interfaces between them.

The area operates as a port. The port services are distributed according to expertise.

There is a need for networking and its implementation is possible. The matter needs to be raised with possible parties in order to achieve a good result.

6.1. Interface expenses for transfers

- o interface expenses are the biggest cost
 - repeated transfers are the biggest problem
- o practical solution
 - where to unload
 - where to load
 - the aim is to be as close to the next stage as possible

7. Different parts of the logistics centre services

7.1. Containers and the number of wagons

The aim is to load the containers on to a train quickly. The number of wagons can be reduced through the operations of the logistics centre.

7.2. Necessary premises

Storage space

- cold
- freezer
- warm

Picking space

Customs

Loading docks

• unloading/loading

Offices

Loading on to a train

- container crane

Fuels

refuelling

Laundry

7.3. Information systems

Information must be preserved throughout the transport chain.

7.4. Maintaining freshness

The demands for food supplies deliveries are high. The example is from the guidelines of the Finnish Food Safety Authority, Evira.

7.4.1. Storing food supplies

Immediately upon arrival, food supplies must be transferred to an appropriate storage or sale point. The required temperature, humidity and sensitivity to odours must be taken into account when choosing these locations.

8. External connections from the logistics centre

Other logistics centres, companies in the area, training cooperation, ports, municipalities. New ideas are required for the implementation.

9. Some of the parties closely involved

Clear participation increases enthusiasm for everyone. For example, logistics can be carried out by Tuoretie. The nearby HahkaWay fresh produce storage and frozen storage can be directly added as a part of the logistics centre. JH-Kuljetus can deliver and service the forklift trucks in the area.

10. Dry port functions

The introduction of a dry port is deemed a modern way of operating. There is a direct railway or road connection to a sea port from a dry port. Cargo from a sea port can be transported to new destinations from this area or the cargo can be stored in the area for a period of time. A dry port is an area where containers and bulk products can be unloaded. A dry port can usually be accessed directly from a sea port by road or by rail. Customs services are an essential part of the services. A dry port improves storage and transport opportunities. Overall, the services of the dry port, of which the logistics centre of Seinäjoki is a part, are an asset for many different types of transport.

Dry Port			
Area	Planning Infrastru	cture Rules	
Operators	Functions	Equiment	
Logistics operator	Road transports	Forklift trucks	
Port operator	Port functions*	Port equiment	١
Railway- operator	Railway transport	Train	

^{*} unloading and loading, storage, customs, maintenance, ICT

11. Food industry operations

Valio, Atria, Altia Group and Suomen Rehu. The aim is to gather other food industry operators into a common local food group from the transport viewpoint as well.

Wholesalers can be grouped separately. Tukkutalo Heinonen and vegetable wholesalers are potential users in the future. At this point in time the vegetable wholesalers will be more interested.

12. Monitoring the development of other logistics centres and possible cooperation

It is possible to create a network that covers the whole of Finland by cooperating with other logistics centres. Is a delivery always taken to its destination or can logistics centres operate as connection points like ports and gather deliveries destined to the nearby areas.

12.1. Kilo and Hakkila

The logistics centres in Kilo and in Hakkila are big operators. They have run into problems due to flawed regional planning. They are running out of capacity in their respective areas. The logistics centre in Seinäjoki can offer new capacity for everyone.

12.2. Innofood Center in Kouvola

The Innofood project in Kouvola has similar goals. It is useful to follow the projects progress. The name of the logistics centre in Kouvola is Innofood Center. It has been called the leading national service centre for the food industry. The aim is to offer food supply operators efficient terminal, distribution and further processing services and the correct environment for the service providers. The goal is to have a direct route to Saint Petersburg. This has not materialised yet.

12.3. Logistikas in Pori

Logistikas operates in Pori, Rauma, Tampere and Kankaanpää. During the past three years, the company's turnover has increased from EUR 1.7 million to EUR 11.1 million. New Logistikas Tampere is a modern and efficient logistics space with capacity to store food supplies. With the new agreement the storage capacity increases to 66,000 square metres.

12.4. Kerca in Kerava

Kerca, the logistics centre in Kerava, is designed as a connecting point for railway traffic and road traffic. It is ideally located between the main railway and the Helsinki-Lahti motorway with a direct railway connection to the port of Vuosaari.

The nearby location of Kerca at the end of the tunnel railway of Vuosaari, near the main railway and near the main routes north, enables the optimisation of delivery chains. Traffic to Russia and

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the Far East can also be served in Kerava.

The logistics centre in Kerava will be built on an area of more than 130 hectares in the Savio district in Southern Kerava.

12.5. Logistics centre in Jyväskylä

The logistics centre in Jyväskylä is part of the same development through the Necl II project.

13. The logistics centre draws in logistics services of the food industry

The logistics centre in Seinäjoki is an excellent resource-combining area. The desired networking and cooperation may work better thanks to the logistics centre in Seinäjoki.

The operations in the area are based on roles selected by companies. A strong functional centre automatically gathers operators to their own tasks.

14. Railways versus trucks

The possibilities of railway and road should also be compared with each other. How many weight and speed restrictions are there on railways? Schedules may prove problematic. The transition to railways must be done systematically and gradually.

The best change would be for new operators, in addition to VR, to join in.

Competition is not the correct way. The correct way is to emphasise cooperation, profitability and the reduction of emissions.

15. Reservations for the industrial area and reality

The new area is 250 hectares. All the industrial plots in the area are reserved for logistics companies. One of the most desirable is a company leasing out refrigerated containers for food supplies. The logistics centres for trade are worth determining to boost the traffic in the area. Lidl has two logistics centres in Finland. One is in Janakkala and the other in Laukaa. Is it possible to get central firms and logistics centres for trade to Seinäjoki? The current 250 hectare area can be expanded multifold along the railway. Could the concept of food auctions be transported to Finland from the UK? The Chamber of Commerce sells local vegetables in an auction and everyone participates. For example, Citymarket, Sokos, Lidl and Russian stores can be clients. The truck road is a central route which serves the area. For example, the truck road going past the nearest HahkaWay frozen storage leads straight to the logistics centre in Seinäjoki.

16. Readiness to operate with central firms

We must prepare for Inex, Keskolog and Tuko connections on behalf of clients.

16.1. S Group, SOK (Suomen Osuuskauppojen Keskuskunta)

16.1.1. Inex responsible for logistics

Inex Partners Ltd is responsible for the supplies and logistics for S Group chains, especially imported and industrial food supplies. SOK owns the company with Tradeka Ltd.

16.2. Kesko, Ruokakesko Ltd

16.2.1. Keslog responsible for logistics

Ruokakesko develops business models for the food trade by operating as a wholesaler and retailer. Ruokakesko has six chain concepts for grocery shops in Finland and these include approximately 1,100 K shops in total. Ruokakesko is responsible for managing the chains and the store managers are responsible for management and operations of the shop. (www.kesko.fi)

16.3. Tradeka's Siwa, Valintatalo and Euromarket shops, Stockmann Herkku's, and Wihuri clients Tarmo and M shops.

16.3.1. Tuko Logistics Oy responsible for logistics

Tuko Logistics Cooperative offers its clients storage and distribution services. Tuko Logistics serves 40 cash and carry outlets, 1,000 grocery shops and 4,500 commercial kitchens on a daily basis.

17. Service development, businesses and clients for the logistics centre

The logistics centre in Seinäjoki is built in the middle of the strongest food industry region in Finland. Operations with the surroundings have to be seamless all the time.

17.1. Introduction of the logistics centre

The starting point for the use of the logistics centre is an open model. However, the launch is in the hands of a few brave pioneers. The modelling of operations will start from scratch. At this point logistics companies must openly inform their clients of a new method which is in the early stages of its development. The modelling is done together with the clients. The benefits of the desired state must already be conveyed to the clients at this point.

There is no need to build new facilities if the services can already be found in the nearby area. Facilities are built according to need.

Some companies are left with the pioneering work. Healthy competition and laws determined by the market must remain in the future as well.

17.2. Strategy developers have key roles

The aim is to crystallise the idea into a few clearly comparable commercial variables. The idea is presented to strategy developers at different companies. The overall idea could also be presented to an essential part of a larger chain. For instance, it could be that a producer of food products does not benefit from the transportation link directly, but the logistics company in the same chain does. It is also possible to find support for the development through an enthusiastic sponsor, who can push some unfinished business forward.

17.3. Examples of different opportunities for companies

17.3.1. Tukkutalo Heinonen

Tukkutalo Heinonen operates in an industrial area. Their region is the Vaasa Province and transports are handled independently. For these reasons they do not currently see any benefit from the logistics centre in Seinäjoki. However, Kimmo Heinonen deemed it possible that new areas might open at which point the transports would serve them as well.

17.3.2. Närpes Grönsaker

Närpes Grönsaker delivers tens of millions of kilos of vegetables annually. They deliver throughout the country. At some point during their operations, they have also delivered vegetables to Estonia. So far, there have not been any links to the port of Kaskinen. Both Ove Grandell, head of Närpes Grönsaker, and Timo Onnela, Port Captain at Kaskinen, confirmed this.

Vegetable deliveries from Närpes are based on the description, "free in Närpes". From here on the orderer is responsible for transport. The main clients are central firms. Previously, vegetables have also been delivered by rail from the Närpes station. Railway use for deliveries is thus deemed possible. The schedule was predicted to be as quick as it currently is. The aim is to have the goods leaving in the evening to reach its destination by the following morning. What is most thought about is managing deliveries in the capital area. The attitudes of the central firms and wholesalers are important. How would they handle the deliveries at the other end?

Närpes Grönsaker is the largest vegetable wholesaler in the region. Similar but smaller wholesalers exist in Seinäjoki, Vaasa and Korsnäs.

17.3.3. HahkaWay

HahkaWay's services could be a part of the chain.

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HahkaWay's frozen storage with its 16,000 pallet places is the largest single frozen storage space in Finland. Its almost 7,000 square metres and 70,000 cubic metres of frozen storage centralises storage in the Seinäjoki region.

Fresh produce have their own space And there is room for other products that do not require cool or freezer storage. HahkaWay has the space, information systems and the staff to offer various picking, mixing, packing and storage services for cool and frozen products along with other products.

17.3.4. Tuoretie

Tuoretie is responsible for logistics from the Atria, Saarioinen and Pouttu plants onwards.

17.3.5. Atria

Atria could be a part of the same chain. Atria Finland has already centralised the frozen storage of its raw materials to Seinäjoki in the new logistics centre operated by HahkaWay Ltd.

The most significant export areas are Sweden, Russia, the Far East and the Baltic Countries. The turnover for the wholesale and export trade is almost EUR 80 million, and it makes up approximately 10% of Atria Finland's turnover.

17.3.6. JH-Kuljetus

JH-Kuljetus gets the transport units on board quickly with strong forklift trucks.

18. Information about the logistics centre to central firms and other major businesses

The links to central firms are best built through local logistics companies. For example, HahkaWay and Tuoretie have daily interaction with the logistics companies for the central firms.

19. Various parties and responsibilities of the logistics centre

The Regional Development Centre for the Seinäjoki region and the Regional Council of South Ostrobothnia have taken the responsibility for developing the logistics centre in Seinäjoki. The project funds have come from public funding. In the future, the functional responsibility will be distributed among the companies. The aim is to also get private funding to support the operations and development of the area.

20. Information management and data communications in the logistics centre

The logistics companies and haulage companies use several different ICT systems. There are differences on all levels: terminals, software, interfaces and practices.

It is impossible to achieve a shared system that is approved and used by everyone. Any existing systems for companies must be taken into account. The development is done at the interfaces of applications and device selection.

First, it is good to determine the communication demands between the systems. This should be done practically and from the point of view of the companies. The development situation and attitudes of the companies determine the method of development.

The new solution must bring new business, improve operational preconditions and thus get companies committed to continual development.

21. Main aspects of the commercial solutions

Trains create more time for operations and sales

- o renewals approximately ten years less frequently than trucks
- o one day less makes Atria competitive with HK in the capital area

Points of interest for the buyer

- o price
- o delivery reliability
- o quality
- o added value

Comparative calculations

- o modelling on paper and calculating the price
- o a comparison with current situation as clear as possible concerning pricing
- o negotiations with VR
- o Starting points for the calculations
 - for example, one transport in a train wagon is EUR 400 (fits 1,300 Transbox boxes) and comparing with the current situation

Logistics centre in Seinäjoki

- o a link to the port of Vuosaari
- o Saint Petersburg Vuosaari Seinäjoki Kaskinen and the rest of Finland

Abroad from Kaskinen

City of Seinäjoki

- o terminal charge for use in the loading area
- o operator/loader pays
- o it is easier for the city of Seinäjoki to increase their funding at this stage

Interface expenses

- o interface expenses are the biggest cost
 - transferring over and over again is the biggest problem
- o practical solution
 - where to unload
 - where to load
 - the aim is as close to the next stage as possible

APPENDICES

22. Appendix 1 Questions

How will operations be centralised to the logistics centre in Seinäjoki?

How many employees are needed to operate the centre?

What are the services of the centre?

Are there more companies in the area?

How do the expertise and education at the University Consortium of Seinäjoki correspond to the operations at the logistics centre in Seinäjoki? What new things can Foodwest offer for the logistics centre?

Where can an example be found?

Port operations are determined by law. How is that law transferred to dry ports? For example, "port companies can charge a fee for using the port" sounds very good from the point of view of the port founder.

23. Appendix 2 Excerpts

1,000 train wagons

The largest business unit is **Nurminen Cargo** who offer railway transports, terminal services and documentation services including forwarding and customs services. Railway transports are an important business sector and the company owns approximately 1,000 train wagons. Furthermore, the company operates hundreds of wagons owned by others. Nurminen does not own locomotives. In Finland their partner is VR and in Russia the national railway operator RZD. Nurminen Logistics is a significant company in the railway traffic between Finland and Russia as well as other CIS countries. Nurminen terminals, including Vuosaari, have their own tracks.

The strengths of the small and medium enterprises of the food industry lie in location

The most significant commercial strengths of the small and medium enterprises of the food industry are linked to the knowledge of the local market and operating near customers. Small enterprises use raw materials from their province and so local suppliers of raw materials are important for their competitiveness. Professional staff, good reputations and the speed and flexibility of the service are emphasised as competitive factors. The data is based on a study on the operational environment of small and medium enterprises of the food industry from 2008. The study was done at Savonia University of Applied Sciences as an assignment from the Food-Finland theme group.

Food industry

The Finnish food industry is constantly developing and manufacturing food for Finnish consumers while also operating internationally. The domestic food industry's share of food sold in Finland is 85%. The definition of the industry also includes processing domestic farm produce and imported raw materials. 85% of used raw materials are domestic.

The main sectors of the industry are **meat processing**, **bakery** and **milk processing**.

Companies have clear expectations

The biggest expectations in the Ring V zone (Kehä V) focus on developing road connections and open logistics centres. Open logistics centres refer to centres where different companies can use different shared support services.

25. Appendix 3 Route examples to the logistics centre: Atria and Valio

ROUTE: LOGISTICS CENTRE - ATRIA



ROUTE: LOGISTICS CENTRE - VALIO

