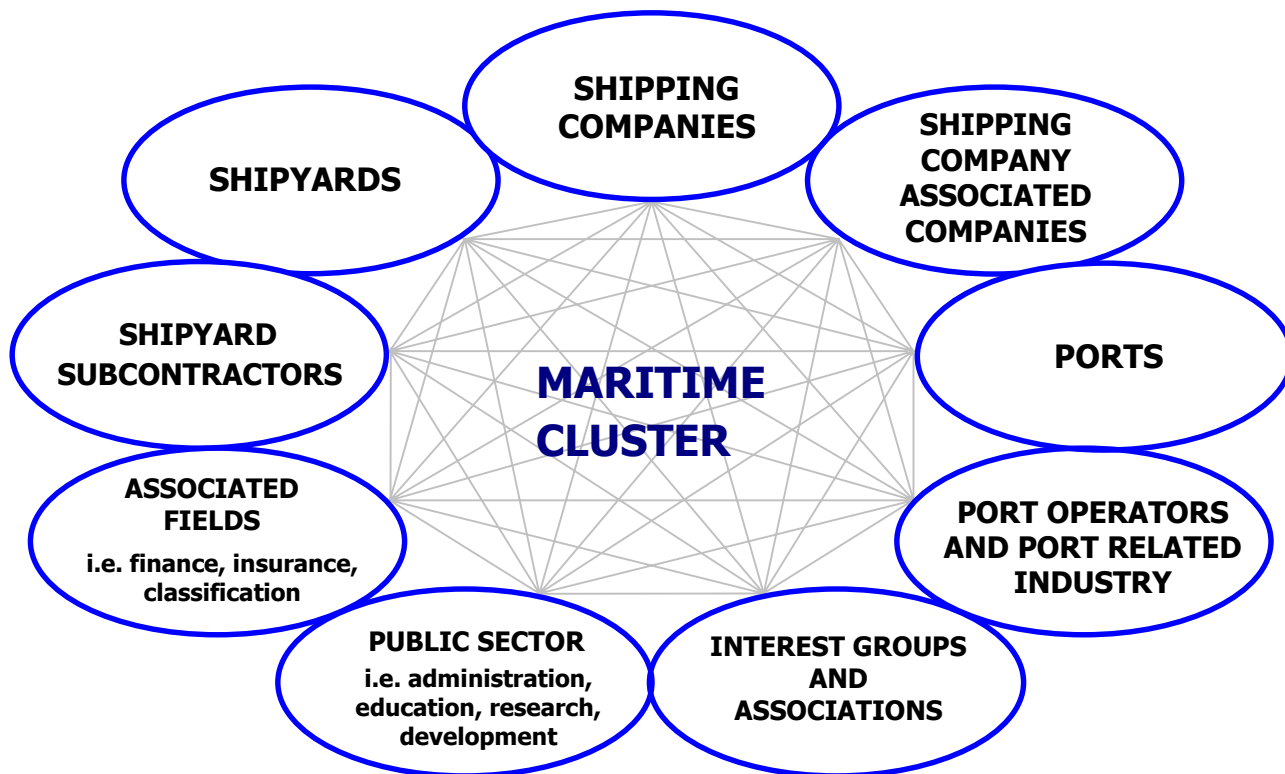




A maritime cluster formed by several branches of industry exists in Finland. **For example, seafaring, marine industries and port activities in the public and private sectors belong to the maritime cluster.** The primary purposes of the Finnish Maritime Cluster Study were the specification of the importance of the maritime cluster and its manner of networking and the description of its social and economic importance. The results of the study that was published June 18th are presented in this brief description.



DIRECT ECONOMIC IMPACTS AND IMPACT ON EMPLOYMENT IN THE PRIVATE SECTOR AND IN PORTS

As part of the study, an extensive company inquiry was carried out in order to assess the maritime cluster's economic impacts and its influence on employment. The inquiry was directed at the most important companies in the different fields of the maritime cluster. Altogether 241 companies were taken into account and interviewed. This figure includes ports operating in the public sector in addition to private sector companies. In the course of the study, information concerning about 2,400 maritime cluster companies was obtained from the Tax Administration. **The total turnover of all the companies directly connected with the maritime cluster was about EUR 11.4 milliard. The maritime cluster directly employs about 47,000 people in the private sector (ports included).** The impact of the cluster is manifold when seen through consumption. The public sector is also an important employer in the maritime cluster.

	No	Turnover	Maritime sector share		No	Number of personnel	Maritime sector share	
		MEUR	%	MEUR			%	No
Companies that answered inquiry	241	16,517	47	7,709	239	86,981	40	34,717
Companies that came up otherwise	2,384	73,055	5	3,653	2,293	244,437	5	12,222
Total	2,625	89,572		11,362	2,532	331,418		46,939

"Maritime sector" stands for the all the activities of a company having to do with seafaring, marine industries and port operations. In the table on the following page, the key figures of the companies that took part in the inquiry are presented divided according to the different maritime sectors.

KEY FIGURES FROM THE MARITIME CLUSTER COMPANY INQUIRY

In the study, 241 companies from different maritime cluster fields were taken into account and interviewed. The total revenue of this group in 2001, according to information provided by company management, was about EUR 16.5 milliard, of which the maritime sector share was about EUR 7.7 milliard. The companies employed about 87,000 people, of which about 35,000 worked in the maritime sector.

Companies	No of comp.	TURN-OVER		Maritime sector share		No of comp.	STAFF		Maritime sector share	
		MEUR	%	MEUR	%		No	%	No	
Shipyards	5	1,549	100	1,549	100	5	6,657	100	6,657	
Shipyards subcontractors	136	8,919	30.1	2,681	30.1	132	41,942	25.9	10,846	
Shipping companies	18	2,123	100	2,123	100	18	9,558	100	9,558	
Ports	25	182	100	182	100	27	1,067	100	1,067	
Shipping co. related	38	2,914	13.4	390	13.4	38	22,727	7.3	1,659	
Port operators	17	446	91.8	409	91.8	17	3,930	98.6	3,875	
Port related	2	384	97.3	374	97.3	2	1,100	95.9	1,055	
TOTAL	241	16,517		7,709		239	86,981		34,717	

QUESTIONNAIRE STUDY:

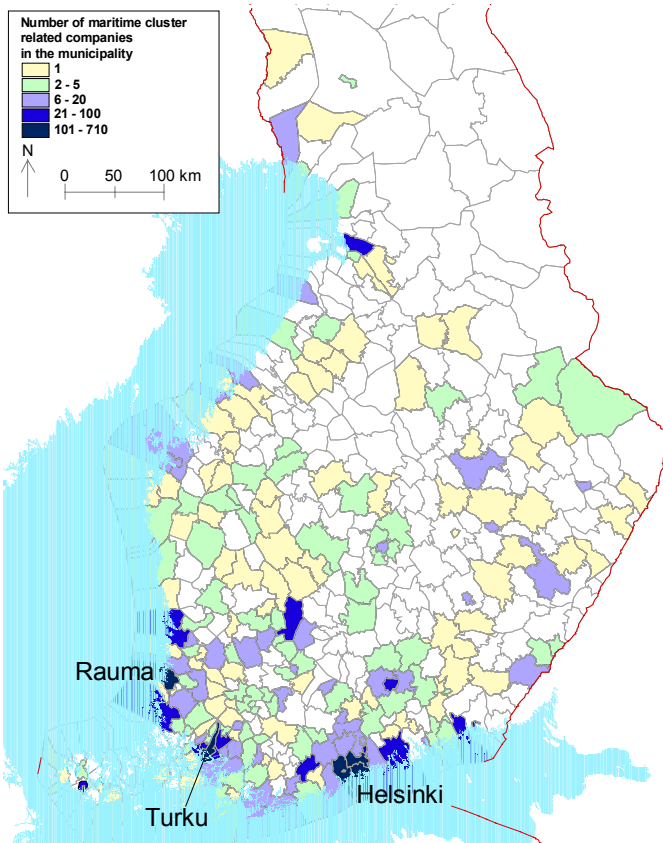
The questionnaire contained questions about company key figures, the competitive situation, demand and networking in buying, selling and co-operation. In addition, company management was asked to answer six broad and wide-ranging questions concerning company strategies. The answers to these questions were used to establish management views on government policy and the effect that government measures have on companies.

The results of the study are presented in two broad chapters. A list of companies that participated in the study is given as an appendix to the report.

"Maritime sector" stands for the all the activities of a company having to do with seafaring, marine industries and port operations. The figures given in the table can be added together.

According to information obtained in the inquiry, of all the companies associated with shipyards, shipping companies and ports (i.e. contractors, subcontractors, co-operating companies) about 50 percent are involved in more than one network. **This means that different maritime cluster fields, shipbuilding, shipping and port operations are not separate from each other but form a unity and interact closely with one another.**

LOCATIONS OF MARITIME CLUSTER COMPANIES



Altogether 2,881 companies associated with the maritime cluster came up in the course of the study. Looking at the location of these companies it was determined that there are maritime cluster companies in altogether 224 municipalities in Finland.

Most of the maritime cluster companies are situated in the coastal municipalities in large cities. The companies are clearly concentrated in the Helsinki, Turku and Rauma areas. In these areas and in the Åland Islands the influence of the maritime cluster is at its greatest.

Inland, numerous maritime cluster companies have concentrated in the Tampere and Lahti areas. In addition, there are many maritime cluster companies in large inland cities such Kuopio, Jyväskylä, Savonlinna and Lappeenranta that are situated along the waterways. It should be noted that there are also some maritime cluster companies in other inland municipalities.

The influence of the maritime cluster reaches all over Finland except for the northernmost part of Lapland. There are most maritime cluster companies in Helsinki (708), second most in Turku (335), third most in Vantaa (203), fourth most in Espoo (170) and fifth most in Rauma (125). In the study, 46 maritime cluster companies based in Mariehamn came up.

MARITIME CLUSTER COMPETITIVENESS

Finnish shipbuilding and manufacturing of ship equipment such as motors and **port technology** such as straddle carriers for handling containers, mobile cranes and terminal tractors for handling trailers **are extremely advanced by international comparison**. In recent years, Finland has controlled one fifth of the export market of passenger ships. Finnish companies hold a similar share in the market for marine motors and terminal equipment, if production facilities abroad are taken into account.

In practice, our shipyards have been development laboratories where demanding ship types have been built using the latest technology. The list of companies born from the shipbuilding industry is extensive. Many of these companies such as Wärtsilä (diesel engines), Deltamarin (ship design), ABB Azipod (propulsion units), Mac Gregor (cargo hatches and elevators), Marioff (fire protection systems) and Evac (waste disposal) have been able to grow into world market leaders.

Finnish shipping companies have focused on handling Finland's import, export and other transports in the Baltic Sea area. The demand for affordable transportation by the different industries has helped in developing the shipping companies. In addition, **car/passenger ferry traffic in the northern Baltic Sea is very dense** in relation to the number of inhabitants in the area. The success of Silja and Viking in Swedish traffic laid the grounds for the success of cruiser building in our shipyards. After the dramatic growth of traffic to and from Estonia begins the competition over the St. Petersburg passenger traffic. Goods traffic to and from Russia will also create jobs.

Common know-how, education and research unite the maritime cluster fields. Networking has also improved competitiveness. Without a flexible, innovative and competitive network our shipyards would not have made it in tough, international competition. **Passenger traffic, in turn, has grown a tourism cluster around itself, which guarantees it a constant flow of customers**.

At the moment, subsidies offered in different countries distort the competition situation in shipbuilding and maritime traffic. Competitor countries subsidise their industries and their shipping companies. **Finnish maritime cluster companies want to work under the same preconditions as companies in competitor countries**. However, the aim is to get rid of subsidies and compete with know-how.

THE MARITIME CLUSTER IN THE FINNISH NATIONAL ECONOMY

The maritime sector related turnover of shipbuilders, shipping companies, ports and their contractors, subcontractors and associated companies was about EUR 11.4 milliard in 2001. This figure was divided by sector as follows: shipbuilding EUR 1,5 milliard, maritime traffic EUR 2,1 milliard, port operations EUR 182 million and associated companies of all sectors together EUR 7,5 milliard.

The 2,500 companies that came up in the study provide work for about 47,000 people in the maritime sector. The maritime cluster funds Finnish social security by paying social security contributions, employment pension contributions and unemployment insurance contributions. For example, five Finnish shipyards and their employees raised about EUR 58 million for the public sector as taxes and indirect employee costs in 2001. **Through the wages of the employees the impact of the maritime cluster can be felt in the whole of society**. For example, shipping companies paid their 10,156 employees about EUR 252 million and shipyards paid their 6,657 employees about EUR 203 million in 2001. **The impact of the cluster is manifold when examined through consumption**.

Large maritime cluster companies are highly international and their export is important for the national economy. For example, the export of the 113 most significant shipbuilders and port-related companies was worth over EUR 4 milliard in 2001. **Maritime cluster companies generate important cash flows into the Finnish national economy**.

Large maritime cluster companies also form extensive and diversified company networks. The buys of shipyards, their largest subcontractors and companies associated with shipping companies and ports (117 companies) were worth over EUR 3 milliard 2001. Of this figure, 60 percent were buys from Finland measuring up to EUR 1.8 milliard. **The impact of the large maritime cluster companies can be felt through the subcontractor network all over Finland and in the whole of society**.

The contractor/subcontractor networks of large maritime cluster companies are not separate units, but many companies are part of the networks of shipyards, docks, ports and shipping companies. **Ports, shipping companies and shipyards are interconnected directly and by their subcontractor networks**. In this way, the success of the maritime companies of different cluster sectors reflects on the success of other cluster companies.

Maritime cluster companies also bring income from international markets, which in turn adds to the welfare of Finnish society.

CONCLUSIONS

- The economic impact of the maritime cluster is significant. The cluster influences society and the national economy.
- The maritime cluster reaches into several fields of business. The maritime cluster is a working unit where different fields such as seafaring, marine industries and port operations interact with one another directly and especially through their company networks. The maritime cluster companies feel that it is important to further develop the company networks.
- Large maritime cluster companies are highly international. Maritime cluster companies bring income from international markets, which in turn adds to the welfare of Finnish society.
- Because of the geographical location of Finland, maritime transportation is vital to the Finnish economy. Maritime transport is by far the most important form of transport in Finnish export. The functioning and development of maritime transportation and ports is essential for the competitiveness of the Finnish export industry.
- Finnish ports and Finnish port companies are important links in the foreign trade transport chain. They supply efficient and valuable transport services and form a constantly developing operational environment.
- A high level of technology and innovation is characteristic of large maritime cluster companies. This generates substantial growth potential in their company networks.
- The Finnish maritime cluster has created important business for insurance companies, finance companies, classification societies and others. The life of these companies depends on the maritime cluster core fields remaining strong enough.
- The improvement of the maritime trade image is very important for the development of the whole maritime cluster. The conservation of top quality know-how in Finland requires a constant and secure supply of labour.
- Because different sectors of the maritime cluster form a co-dependent unit with its own special qualities, the maritime cluster should be seen as a whole in public decision-making.

THE RESEACHERS WISH TO THANK ALL THE COMPANIES THAT TOOK PART IN THE STUDY

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