



VAASAN AMMATTIKORKEAKOULU  
UNIVERSITY OF APPLIED SCIENCES

Joleen Diefenbaugh

THE ROLE OF A SHIP AGENT IN  
PORT CALLS FOR MARITIME  
CARGO TRANSPORT

Liiketalous

2025

## TIIVISTELMÄ

---

Tekijä	Joleen Diefenbaugh
Opinnäytetyön nimi	Laivan selvittäjän rooli satamakäynnissä merikonttikuljetuksissa
Vuosi	2025
Kieli	Englanti
Sivumäärä	42
Ohjaaja	Teemu Myllylä

Tämä opinnäytetyö tutkii laiva-agentin roolia ja keskittyy siihen, mitä työhön kuuluu ja mitä taitoja sen suorittaminen edellyttää. Tutkimus selvittää, mitkä tehtävät laiva-agentille kuuluvat satamakäynnin aikana, kenen kanssa he tekevät yhteistyötä ja millaisia haasteita he kohtaavat.

Tutkimus on tehty laadullisin menetelmin. Toimeksiantoyrityksen laiva-agenteilta saatiin tietoa heidän työtehtävistään kyselyn avulla. Tämän lisäksi havainnoitiin laiva-agentin työtä käytännössä. Tutkimuksen tutkimuskatsauksessa hyödynnettiin asiakirjoja ja aiempaa akateemista kirjallisuutta tutkimuskohteesta.

Tulokset osoittivat, että laiva-agentin työ koostuu satamakäyntien järjestämisestä, eri osapuolten välisestä viestinnästä ja sen varmistamisesta, että kaikki sujuu suunnitellusti. Hyvät organisointitaidot, ongelmanratkaisukyky ja selkeä viestintä ovat tärkeitä laiva-agentin ominaisuuksia työtehtävien hoitamisessa. Teknologia on myös tärkeä osa työtä, sillä teknologia auttaa muun muassa laivojen reittien seurannassa, paperitöiden hallinnassa ja tehtävien aikataulutuksessa.

Tämän opinnäytetyön tulokset ovat hyödyllisiä uusien laiva-agenttien kouluttamisessa erityisesti toimeksiantajayrityksessä. Tulosten avulla on mahdollista tarjota myös käsitys laiva-agentin työstä niille, jotka ovat kiinnostuneita alasta.

## ABSTRACT

---

Author	Joleen Diefenbaugh
Title	The Role of a Ship Agent in Port Calls for Maritime Cargo Transport
Year	2025
Language	English
Pages	42
Name of Supervisor	Teemu Myllylä

This thesis examines the role of a ship agent and focuses on the tasks involved and the skills needed to do the job. The study examines what responsibilities a ship agent has during port calls, who they work with, and what challenges they face.

The research was done using qualitative methods. Information about the tasks of ship agents was collected through a survey from ship agents at the commissioning company. The work of a ship agent was also observed in practice. The research review used documents and previous academic writings on the topic.

The results showed that a ship agent's job includes organizing port calls, communicating with different parties, and making sure everything goes as planned. Good organizational skills, problem-solving, and clear communication are important qualities for a ship agent. Technology is also an important part of the job, helping with carrying out tasks like tracking ship routes, managing paperwork, and scheduling tasks.

The results of this thesis are helpful for training new ship agents, especially within the commissioning company. A better understanding of the ship agent's job is also provided for those interested in the field.

## Table of Contents

TIIVISTELMÄ .....	2
ABSTRACT .....	3
1 INTRODUCTION .....	8
1.1 The objectives of the research.....	8
1.2 Research questions.....	9
1.3 Structure of the research.....	9
2 MARITIME TRANSPORT .....	10
2.1 Sea Transports and Port Operations .....	10
2.2 Modes of Sea Transport.....	10
2.3 Types of Cargo.....	12
3 THE ROLE OF A SHIP AGENT IN A VESSEL'S PORT CALL .....	14
3.1 Ship Clearance.....	14
3.2 Nomination and Pre-Arrival Coordination.....	15
3.3 Entry Clearance and Berth Allocation.....	17
3.4 Arrival and Operations .....	19
3.5 Departure and Post-Departure Activities .....	21
4 IMPLEMENTATION OF THE RESEARCH .....	23
4.1 Research Methods .....	23
4.2 Information Retrieval .....	23
4.3 Collection of data .....	24
4.3.1 Aava Shipping as the client company for this thesis....	24
4.3.2 Observation .....	24
4.3.2 Questionnaire.....	24
5 ANALYZING AND INTERPRETATION .....	26
5.1 Analysis phase .....	26
5.2 Examples of the analyzing phase .....	27
6 RESULTS.....	32
6.1 Role of a ship agent in a port and tasks involved.....	32
6.2 Partners and stakeholders of a ship agent.....	32
6.3 Technology used by a ship agent .....	33
6.4 Skills, expertise, and qualities in the work of a ship agent ....	33

6.5	Challenges a ship agent faces and how to overcome them ...	34
6.6	Damages or delays handled by a ship agent in the port .....	34
7	REFLECTION .....	36
8	CONCLUSIONS .....	37
8.1	The significance of the results .....	37
8.2	Limitations of the research.....	37
8.3	Suggestions for Future Research .....	38
9	REFERENCES .....	39

## **PICTURES**

1 Picture. Process Management Stages: From Arrival to Departure...	15
2 Picture. Nomination and Pre-Arrival Coordination Process steps. ...	17
3 Picture. Stages of the Vessel Departure Process.....	22
4 Picture. Theming the role and tasks of a ship agent.....	28
5 Picture. Partners and stakeholders of a ship agent. ....	28
6 Picture. Different technologies ship agents use. ....	29
7 Picture. Theming the skills, expertise, and qualities of a ship agent. .....	29
8 Picture. Most common challenges a ship agent faces. ....	30
9 Picture. How ship agent overcomes the challenges.....	30
10 Picture. Handling damages and delays in a port. ....	31

## Abbreviations

ETA	Estimated Time of Arrival.
ETD	Estimated Time of Departure.
ETC	Estimated time of completion.
IMO/FAL	International Maritime Organization/Facilitation
NOR	Notice of Readiness. A formal notice issued by the ship's master to charterers or cargo interests, declaring that the vessel has arrived at the agreed location and is ready to load or discharge cargo. It triggers the start of the laytime countdown.
SOF	Statement of Facts. A record of all events while a ship is in port, like arrival, loading, and departure.
B/L	Bill of Lading. A shipping receipt, contract, and proof of ownership needed to claim goods.
T2L	Transit Accompanying Document (EU Community Status). A customs document used within the European Union to prove the community status of goods during transit, indicating that they are not subject to import duties or taxes within EU territories.
AREX	Finnish Customs Declaration System. A system used in Finland for customs declarations, ensuring the compliance of goods with EU and Finnish regulations during import, export, or transit processes.
PortNet	A Finnish maritime and port information system.

# **1 INTRODUCTION**

## **1.1 The objectives of the research**

This thesis is conducted for Aava Shipping, a shipping company based in Pori, Finland. Its purpose is to describe and explain the role of a ship agent during a vessel's port call, providing a clear and practical understanding of the tasks and responsibilities involved. The thesis is meant to help new employees by serving as onboarding material. It provides an easy-to-understand overview of the tasks and processes that a ship agent handles, as well as some basic information about maritime operations. The goal is to make it easier for future employees to learn about the role and start working with confidence.

The information in this thesis is based on my own experience working as a summer employee at Aava Shipping, where I got to see and do the work of a ship agent. To make the findings more complete, I have also used questionnaires and observations as research methods. This thesis focuses only on the work done at Aava Shipping and the specific environment where their ship agents operate. It does not cover broader industry topics but instead aims to give a simple and helpful explanation of the role. All the information included comes from reliable and up-to-date sources to ensure accuracy and usefulness.

The main objective of this thesis is to examine the role of a ship agent during a vessel's port call, focusing on the tasks, coordination, and operational responsibilities involved. By detailing the ship agent's role at Aava Shipping, the thesis aims to provide a clear understanding of the job and its requirements.

This work is also aimed to serve as onboarding material for new employees, offering practical insights into the daily work of a ship agent and

the basics of maritime operations. The focus is on documenting the processes and activities during a port call, rather than identifying challenges or issues.

## **1.2 Research questions**

The research questions of this thesis are:

1. What are the tasks of a ship agent?
2. What skills and qualities does a ship agent need?

## **1.3 Structure of the research**

This thesis looks at the role of a ship agent in port operations. It starts by explaining the goals of the study. Then, it covers maritime transport, port operations, and types of cargo. The focus is on the ship agent's tasks, like coordinating with the crew, handling paperwork, and managing port activities. The research methods, including questionnaires and observations, are explained, and then followed by an analysis of the results. The findings cover the ship agent's responsibilities, skills, challenges, and the technology used in the job. The thesis ends with a reflection on the results and suggestions for future research.

## 2 MARITIME TRANSPORT

### 2.1 Sea Transports and Port Operations

Sea transportation depends on efficient port operations. Ports are hubs where ships, trucks, and trains meet to transfer goods. Smooth operations require cooperation between port authorities, terminal operators, and private companies (Logistiikanmaailma, 2024a).

Stevedores also known as dockworkers manage loading and unloading goods, ensuring they move between transport modes and storage. Ports also offer storage and services that support logistics. Their infrastructure, such as docks, cranes, and warehouses, must meet current trade needs and adapt to future growth. (iims, 2014.)

Ports influence regions far beyond their immediate location. Municipal ports handle local needs, while industrial ports support industries or companies. In Finland, sea and land transport are closely connected. In 2017, 15 Finnish ports handled over one million tons of cargo each. Large ports like Kilpilahti, Helsinki, HaminaKotka, Kokkola, Naantali, and Rauma support international trade. Some ports specialize in industries like forestry, metals, or oil. For example, Kemi and Oulu focus on forest products, while Kilpilahti and Naantali serve the oil industry (Tapaninen, 2019, 26–28).

### 2.2 Modes of Sea Transport

Maritime transport can be divided into three types: liner shipping, tramp shipping, and contract shipping. Each of these modes serves different purposes and operates under distinct principles, making them important for the needs of global trade.

Liner shipping involves the regular transport of goods along fixed routes according to a predetermined schedule. Vessels operating in this mode adhere to either precise timetables or more flexible schedules, where not every port on the route is visited on every voyage. On short routes, ships often follow very tight schedules, with frequent departures throughout the day. On longer routes, the schedule usually only shows the departure days. Ships stick to the timetable even if they are not full. If there are many departures in a day, some ships might leave with only half of their capacity filled. (Tapaninen, 2019, 80-81.)

This system ensures predictability and reliability for shippers, providing consistent service regardless of whether the vessel is fully loaded. Liner shipping is particularly well-suited for containerized and general cargo, playing a crucial role in facilitating global trade (Logistiikanmaailma, 2024b).

Tramp shipping, often referred to as bulk shipping, operates without fixed routes or schedules. Instead, it is driven by market demand and supply dynamics, with freight rates fluctuating accordingly. Ships in tramp shipping are usually fully loaded with bulk commodities like coal, grain, or ore, and often travel without cargo between unloading and loading ports (Logistiikanmaailma, 2024c). Typically, a ship transports cargo for just one client. In some cases, the destination of the cargo isn't known when it's loaded because it might be sold to another buyer during the trip, changing where it needs to go. This happens often with for example oil shipments. (Tapaninen, 2019, 80-81.)

Charter freight can be split into two types: time charter and voyage charter. In a time charter, the shipping company rents the ship for a set period. In a voyage charter, the ship is hired for one specific trip and cargo. With a time charter, the ship can come with a full crew, and the owner handles costs like the crew's salaries, food, and maintenance, while the renter pays for fuel, port, and channel fees. (Tapaninen, 2019, 80-81.)

Contract shipping is a mixed mode that combines elements of liner and tramp shipping. In this mode, the shipping company assigns a vessel to a shipper's use, for example, for several years on a particular route. (Tapaninen, 2019, 80-81.)

### **2.3** Types of Cargo

Maritime transport is especially well-suited for moving heavy and bulky goods that don't need to be delivered quickly. Its strength lies in its ability to handle a wide variety of cargo types and shipping needs, being more affordably than, for example, air transport. The cargo transported by sea can generally be divided into two types: bulk cargo and unitized cargo, each with its own unique features and handling requirements. (Tapaninen, 2019, 47-50.)

Bulk cargo includes unpackaged goods transported in large quantities that fill the entire hold of a vessel and are not divided into separate packaging or units (Tapaninen, 2019, 47-50). This category covers materials like coal, cement, crude oil, and liquefied natural gas. Specialized vessels, such as tankers for liquids and gas carriers, are often needed to transport these goods safely. The handling of bulk cargo is designed to move large volumes of similar products with as few steps as possible, which helps to minimize delays and keep operations efficient. (Logistiikanmaailma, 2024d.)

The opposite of bulk is unitized cargo, and it involves goods packed into standardized units like containers, pallets, or trailers. This method makes handling easier, speeds up transit times, and reduces the risk of damage. (Tapaninen, 2019, 47-50.) Packing goods into standardized units helps to streamline operations and lowers the chance of mistakes during loading and unloading. Unitized cargo comes in various forms, including standard containers for everyday goods, refrigerated containers for perishables, and roll-on/roll-off systems for vehicles and trailers (Logistiikanmaailma, 2024e.)

Some goods in the unitized category need additional care. Machinery parts, industrial equipment, or specialized components like wind turbine blades are often transported using flat racks, open-top containers, or on deck when their size and shape exceed standard dimensions. These items require careful planning and handling to ensure they are loaded, secured, and transported safely. Without proper preparation, there is a higher risk of delays or damage, which can disrupt operations.

## 3 THE ROLE OF A SHIP AGENT IN A VESSEL'S PORT CALL

### 3.1 Ship Clearance

When a ship arrives at a port, many supervisors and teams work together to make sure everything goes smoothly. The captain is the most important person on the ship. They oversee the crew, the ship's condition, and making decisions to keep the trip safe and successful. The captain has the final say on everything that happens on board. Before the ship arrives, a lot of planning is needed to get everything ready, make sure things run well during its time at the port, and prepare all the required documents for departure. (Lokin, 2022, 25-27.)

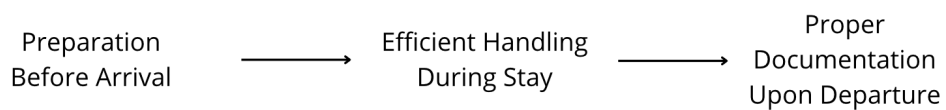
Ship agents work as local representatives for shipping companies, ensuring that everything at the port runs smoothly and efficiently (Logistiikanmaailma, 2024f). A shipping company is a business that owns ships and provides maritime transport services. A charterer is a company that rents a ship to transport goods (Tapaninen, 2019, 80). Because shipping companies often don't have their own staff at every port, they rely on ship agents, also called port agents, to manage important tasks and represent their interests. (Tapaninen, 2019, 131-135.)

The agent's job includes notifying the port about the ship's arrival, working with terminal operators, and arranging services like pilots, tugboats, and bunkering (fueling). The agent also helps with customs paperwork for the crew and makes sure the cargo loading and unloading go as planned. (Lokin, 2022, 25-27.)

The ship agent acts as the bridge between the vessel and stakeholders such as port authorities, customs officials, icebreakers, pilots, suppliers, and stevedores. Ship agent's role includes coordinating crew changes,

sourcing spare parts and supplies, arranging medical services, and organizing crew transportation. They are also responsible for managing financial transactions with authorities and ensuring that all required documents are accurately prepared and submitted. (Lokin, 2022, 25-27.)

Customs clearance is another important part of a ship agent's responsibilities. This involves preparing and submitting essential documents like entry manifests, commercial invoices, and bills of lading to ensure goods can move smoothly through the port. These documents are crucial for releasing goods and calculating any duties that need to be paid. By managing this process effectively, ship agents help avoid delays and ensure all regulations are followed. (Logistiikanmaailma, 2022a.)



1 Picture. Process Management Stages: From Arrival to Departure.

### **3.2** Nomination and Pre-Arrival Coordination

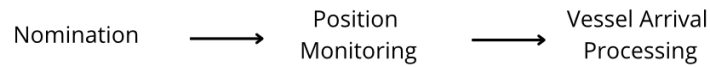
A port call involves a series of connected tasks and events that ensure a vessel's needs are met during its visit to the port. The process begins when the shipping company submits a request and ends once all the vessel's requirements have been handled. In many ways, the vessel can be seen as the customer in this process. Understanding these steps is important to appreciating the work involved in ship clearance. (Logistiikanmaailma, 2024f).

The first step is the nomination, which is the official assignment from the shipping company. When nominated the agent is provided with documents about crucial details, like where the vessel is coming from, its destination, the type of cargo on board, and its estimated time of arrival (ETA). Once the nomination is received, it's important to inform everyone involved, including cargo handlers, port operators, and other stakeholders. Sharing this information early on helps ensure that everything runs smoothly. From this point, the vessel's ETA and position are closely monitored, with regular updates sent to keep all parties informed. (Lokin, 2022, 25-27.)

As the vessel gets closer to the port, its ETA becomes more accurate, and preparations increase. At this stage, arrangements are made for the workforce and services needed to load or unload cargo. Any delays in organizing these resources can cause inefficiencies that ripple through the entire process. To avoid this, a pre-arrival notice, or prospect, is sent out. This notice provides information like the vessel's berth assignment, the updated ETA, and estimated start and finish times for cargo operations. Additional details may be included depending on the situation. (Lokin, 2022, 25-27.)

Pre-arrival coordination relies heavily on accurate timing and good communication. Updates to times like ETA are particularly important, as they help everyone plan their activities and avoid unnecessary delays or confusion. Keeping everyone on the same page ensures the process stays on track. (Lokin, 2022, 25-27.)

Real-time communication tools make a big difference in this regard. In Finland, ship agents use platforms like PortNet (Traficom, 2024a) to update schedules such as ETA and ETD. Many ports also use the Port Activity App (Portactivity, 2024) to share real-time information on ship movements, berth planning, and service coordination. These kind of communication apps, combined with careful planning, help reduce delays and cut costs. (Lokin, 2022, 25-27.)



2 Picture. Nomination and Pre-Arrival Coordination Process steps.

### 3.3 Entry Clearance and Berth Allocation

Before a vessel arrives at the port, ship agents work closely with port supervisors to assign the most suitable berth. This decision depends on factors such as the vessel's draft, length, and the requirements for loading or unloading cargo. The draft defined as the vertical distance between the ship's keel and the water's surface must be carefully evaluated to avoid grounding and ensure a safe approach. Providing precise berth details is essential for the captain and pilots, as this information helps them navigate and dock efficiently. Finnish maritime regulations emphasize the importance of accurate berth assignments to maintain safety and smooth traffic on navigational routes. (Traficom, 2021a.)

Nautical services, such as pilots, tugboats, and linesmen, play an important role in helping ships navigate and dock safely. Pilots guide ships through the port's waters, tugboats help them maneuver, and linesmen secure the ship to the dock. These services are arranged based on what the ship and the port need. (Lokin, 2022, 25-27.) In Finland, the law requires certain vessels to use pilot services when navigating designated waterways (Finnpilot, n.d). Pilots rely on their expertise in local conditions, such as underwater obstacles and port-specific requirements, to provide accurate guidance, as outlined in the Finnish Pilotage Act. (Finlex, 2023.)

Ship agents also inform to the vessel about its docking procedures, whether bow-first, stern-first, or with cranes directed seaward. Docking

decisions depend on safety considerations and operational needs. For example, positioning cranes toward the sea ensures there is no interference during loading and unloading operations.

Ensuring compatibility between a vessel's draft and the actual navigable depth of the fairway is a safety measure. However, Traficom notes that a waterway's design depth does not always guarantee safe passage under all conditions or speeds, which highlights the importance of continuous monitoring and assessment of waterway conditions. (Traficom, 2021b.)

During the check-in process, the vessel's ice class receives particular attention, especially during Finland's winter navigation season. Ice class ratings indicate a vessel's ability to navigate in icy conditions and withstand ice pressure. Factors such as engine power, hull reinforcement, and propulsion system strength determine this classification. Meeting ice class standards is necessary to ensure maritime safety (Traficom, 2024b). In Finland, vessels must comply with specific ice class requirements to qualify for icebreaking assistance in designated fairways (Vayla, 2024).

Ship agents are also responsible for verifying the validity of the vessel's certificates and submitting mandatory notifications through the PortNet system. PortNet, managed by the Finnish Transport and Communications Agency in cooperation with customs authorities, serves as the primary platform for maritime traffic information in Finnish ports (Tulli, 2018). Notifications include ship declarations, cargo declarations, waste declarations or exemption certificates, and hazardous cargo declarations, where applicable (Tapaninen, 2019, 132-133). Ship and hazardous cargo declarations must be submitted at least 24 hours before arrival, while cargo declarations are due no later than two hours after mooring (Traficom, 2024a.)

Compliance with other regulations requires further notifications. The Finnish customs mandate a 24-hour advance arrival notice, along with

declarations related to security, hazardous materials, cargo, and passengers. Ships are required to give a waste declaration, while the IMO/FAL Convention specifies the submission of a crew list for domestic port-to-port travel. For vessels arriving from foreign ports, ship agents must also ensure the submission of ship stores and crew belongings lists (Tulli, 2018).

Customs declarations for imports and exports must be handled in accordance with Finnish Customs guidelines. For example, AREX declarations are required for goods originating from non-EU countries or EU community goods (Logistiikanmaailma, 2017). Before the ship's arrival, the captain is contacted to confirm additional information, such as the need for tug assistance during strong winds or the vessel's readiness for cargo operations.

### **3.4 Arrival and Operations**

The vessel's operations, loading, unloading, or both require careful coordination and communication with all relevant parties. The type of shipping documents needed depends on whether the cargo is being loaded, discharged, or where the vessel is heading next (Logistiikanmaailma, 2024g). At the start of operations, the vessel's captain issues a "Notice of Readiness" (NOR) to confirm the ship is ready for loading or unloading. A "Statement of Facts" (SOF) is prepared to record the vessel's time in port, including start and finish times for operations, any interruptions, and other important details. In addition to the SOF, key documents for loading vessels include the "Bill of Lading" (B/L), cargo manifest, and T2L document.

The "Bill of Lading" serves three main purposes: it is proof of the carriage contract, a receipt for the loaded goods, and a guarantee to deliver the cargo to the correct destination, where it is released to the original document holder (Logistiikanmaailma, 2022b). The cargo manifest lists

all the goods loaded at a specific port and destined for the same discharge port, showing details consistent with the Bills of Lading (Tapaninen, 2019, 153). The T2L document is required for customs purposes to prove that the cargo has EU community status. For cargo arriving in Finland from outside the EU, an AREX customs declaration must be submitted both before and after unloading. (Tulli, 2024.)

The loading and unloading process involves many parties who need to stay updated on the vessel's progress. These include the ship's crew, stevedores, the shipping company, cargo shippers, and subcontractors, such as crane operators. In addition, notifications must be sent to other stakeholders like the next port of call, pilots, tugboat operators, port supervisors, and icebreakers. The ship agent plays a role in coordinating these communications and ensuring that everyone is on the same page. (logistiikanmaailma, 2024f)

Unexpected challenges can arise during operations, such as equipment failures or delays. Resolving these issues requires collaboration between all involved parties to ensure the vessel's best interests are met. Once operations are completed, the ship agent finalizes the documents, ensuring all paperwork is in order. After this, relevant stakeholders are informed that operations are complete. (Logistiikanmaailma, 2024g).

During the port call, other services are arranged to prepare the vessel for its next journey. These services can include vessel's maintenance, fueling (Bunkering), crew changes, refilling fresh water supplies, repairs, certificate renewals, or sourcing spare parts and other necessary services. While these aren't always critical for a quick turnaround, they're important for the ship's long-term performance and reliability (Lokin, 2022, 25-27.) The ship agent ensures these tasks are organized and completed efficiently during the vessel's stay (Tapaninen, 2019, 132).

Crew changes happen often in part of the port call. This involves replacing some or all the ship's crew, with outgoing crew members returning home and incoming crew arriving to take their place. Since ship crews

often consist of international members, crew changes typically involve air travel. The ship agent arranges transportation, hotel accommodations, and other logistics to make the process as smooth as possible. The agent must notify customs about the crew change and handle any visa stamping or documentation required.

### **3.5** Departure and Post-Departure Activities

At this stage, the vessel's operations are complete, and all necessary services or supplies have been arranged. Before operations finish, the captain is asked how much time is needed to prepare for departure. This time is typically used for final tasks, such as securing cargo, closing hatches, or other last-minute work. Throughout operations, updates on the expected completion time are shared with the stakeholders involved in the departure process. Based on this, the vessel's "Estimated Time of Departure" (ETD) is determined

The services required for a vessel's departure vary depending on the season, weather conditions, and ice situation, as well as the vessel's specifications. In winter, additional steps are necessary due to ice. A tug is ordered to clear ice from the harbor basin, while an icebreaker ensures the fairway is passable. To keep the departure on schedule, preliminary times are communicated early to the pilot, tug operators, and icebreaker teams. These services must then be confirmed no later than two hours before the vessel's departure to avoid delays (Finnpilot, 2024).

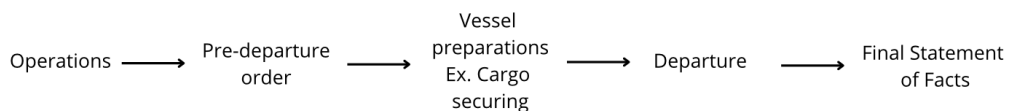
The "Estimated Time of Completion" (ETC) for cargo operations is closely monitored through regular updates from the foremen. Based on the captain's instructions, a specific amount of time is allocated between the completion of cargo work and the vessel's departure to finalize all necessary services. This ensures that tasks such as ordering the pilot, notifying port supervisors, and arranging the tug and icebreaker are completed on time. Preliminary departure times are communicated in advance to the pilot, tug operators, and icebreaker teams, and these are

confirmed as the work nears completion. Even if the vessel does not require towing assistance, the tug is still needed in winter to break any ice in the harbor basin to allow a smooth departure.

If everything proceeds as planned, the foreman calls one hour before cargo operations are complete. At this point, the ship agent finalizes the departure arrangements by booking the pilot, notifying port supervisors, and confirming the tug and icebreaker services. The exact departure time is agreed upon with the captain and all stakeholders.

However, unexpected issues can occur that delay the process. If problems arise during operations, such as equipment malfunctions or delays, the foreman informs the ship agent, and all departure plans must be adjusted. In such cases, the departure time remains uncertain until the situation is resolved. Existing orders are canceled, and all relevant stakeholders are updated on the new status. Once the issue is resolved, a revised departure plan is put in place, ensuring all services are re-scheduled accordingly.

After the vessel has departed, the ship agent sends a departure notification along with all the necessary documents related to cargo operations. Once the ship is on its way, the final tasks for the ship agent include completing shipping documentation and handling the invoicing for the port call. (Tulli, 2018.)



3 Picture. Stages of the Vessel Departure Process.

## **4 IMPLEMENTATION OF THE RESEARCH**

### **4.1 Research Methods**

This thesis is based on qualitative research, using a questionnaire, observations, and content was analyzed using the content approach method. Qualitative research is an approach that explores real-life situations by analyzing detailed data instead of focusing on numbers. It is grounded in theoretical perspectives that help make sense of the findings and can be guided by existing theories or emerge from the data itself. (Tietoarkisto, n.d.)

Content analysis is a method in qualitative research, used to examine recurring themes, patterns, and meanings within different types of materials, such as interviews, documents, and media content. It helps structure and interpret information systematically, either by summarizing clear messages or uncovering deeper insights. (Tietoarkisto, n.d.)

In this research the questionnaire gave insight into the experiences of ship agents, while observations provided a firsthand look at their daily work during a port call. In addition, relevant documents and literature were reviewed to support the findings. These methods helped create a clear and realistic picture of what a ship agent does and what skills are needed for the job.

### **4.2 Information Retrieval**

The information for this research was gathered from various sources, including the library, Google Scholar, and Finna.fi. Relevant keywords used in the search included for example "ship agents," "ship clearance," "port calls," and "ship management."

The search was limited to academic research, books, articles, and official including government websites. To ensure the reliability of the sources, materials older than ten years were excluded, and thesis-level studies from universities of applied sciences were not included.

### **4.3 Collection of data**

#### **4.3.1 Aava Shipping as the client company for this thesis**

Aava Shipping is a Finnish company specialized in port operations, currently operating only in Finland, with an office in Pori. The company provides stevedoring services, port storage services, and ship agency services. The company has fewer than ten permanent employees in Pori, two of whom work as ship agents. However, the company operates across the country, employing various subagents as needed throughout Finland.

#### **4.3.2 Observation**

The observations were based on work experience as a ship agent at the client company during three months at summer 2024 from the beginning of June to an end of August. This provided an opportunity to see the job in practice, coordinating with the crew and port stakeholders, handling documentation, and managing operational details. By observing and participating in real port calls, a better understanding was gained of how the process worked and what made a port call successful. Efforts were made to remain neutral by asking questions from ship agents and taking notes and carefully documenting observations.

#### **4.3.2 Questionnaire**

A questionnaire was used to gather information from the client company's ship agents about their work during a port call. The goal was to

learn about their responsibilities, including communication with the vessel and port authorities, handling documentation, and organizing services and firsthand insights into what the job involved and how it fitted into the larger picture of maritime operations.

The survey questionnaire was developed based on the themes, observations, and research questions that emerged in the theoretical section. Ultimately, six questions were selected for the questionnaire, which was considered a good number because the questions were diverse, and the aim was to receive as comprehensive answers as possible.

The surveys were sent to the two ship agents of the commissioning company at the beginning of January 2025. Detailed and thorough responses were received from both ship agents for each question.

## **5 ANALYZING AND INTERPRETATION**

### **5.1 Analysis phase**

Qualitative analysis was used to make sense of the information gathered through observations and questionnaires. This analysis helped identify the essential skills, tasks, and processes involved in a ship agent's work. An overview of the basic knowledge required in maritime operations, such as port call procedures, stakeholder collaboration, and regulatory compliance, was also included. The focus of the analysis was on presenting this information in a clear and practical way, suitable to study for anyone interested in the role.

The research data was collected in two different ways. First, the research data consisted of personal observations and notes made about the role of a ship agent. The observational material was gathered during the summer of 2024 at the client company. In addition, more data for the study was collected from the responses of two ship agents from the client company. The ship agents were asked to share their experiences and knowledge of the ship agent's work. The surveys were gathered from the agents at the client company via email in January 2025.

Although the sample size for the survey was small for this thesis, in qualitative research, the focus is on gaining in-depth insights into the subject, so even a small sample was sufficient for this study (Saaranen-kauppinen & Puusniekka 2006). Additionally, it was not possible to obtain a larger sample within the framework of the client company.

The results were analyzed using content analysis with an inductive approach by carefully looking at and studying the data as whole to try and get understanding of the big picture that whole data represents. After understanding the big picture of the data was possible to see how different themes and ideas are connected. The goal was to find recurring words and key phrases, similarities, or differences and themes in the

data that were relevant to the research questions. The goal was to let themes naturally emerge from the data itself without letting any pre-existing or predetermined ideas get in the way. Attention was given not only to the information directly provided but also to what could be inferred from it. This helped to see how the results fit into the bigger picture of the research topic. (Kylmä & Juvakka 2014.)

The data was broken down into smaller pieces, like sentences or phrases, and grouped into themes that reflected the main ideas of the study. This helped create a clearer picture of how the topic was discussed across different parts of the data.

## **5.2 Examples of the analyzing phase**

These examples of images underneath illustrate the key recurring themes related to ship agents. These themes were categorized to analyze the content into main themes. These themes have been used to analyze the responses to the research questions. In the following pictures the recurring words and sentences are on the left of the column and the categorized main themes are on the right. In the pictures below, the recurring words and sentences that emerged from the material are on the left, and the themes derived from them are on the right. The subject areas of each question are addressed separately in their respective tables (4–10) below.

- What is the role of a ship agent in a port and what tasks does it involve?

Representing shipping company	Cooperation
Cooperation with the port	
Cooperation with the principal	
Cooperation with the authorities	
Following the guidelines provided by the shipowner	
Coordinating the vessel's arrival and departure with the port and other authorities	Taking care of arrangements
Handling cargo delivery and receipt on behalf of the principal	
Taking care of the needs of the captain and crew	
Coordinating necessary port and other related services	
Securing a suitable berth for docking	
Ensuring the efficiency of the port visit	

#### 4 Picture. Theming the role and tasks of a ship agent.

Here above is an example of thematization related to the role and tasks of a ship agent in the port. Based on the responses, cooperation and taking care of arrangements merged as the main themes related to the ship agent's role and tasks as shown in picture 4.

- What types of partners and stakeholders does a ship agent collaborate with?

Ports	Ports and Infrastructure
Stevedoring companies	
Tugboats	
Icebreakers	
Pilots	
Authorities (e.g., customs, border guard)	Authorities and Legislation
Lawyers	
Shipping companies	Transport Services
Ship captains and crew	
Transport and logistics companies	
Provisioning companies	Special Services
Various specialized services (e.g., electrical service providers)	

#### 5 Picture. Partners and stakeholders of a ship agent.

Picture 5 categorizes the ship agent's partners. These include the port and its related infrastructure, authorities, transport services, and other specialized services.

- How does a ship agent utilize technology in their work?

Real-time tracking systems	Technological Systems
Automated booking and payment systems	
Communication systems	
Sea and weather forecasts	Weather and Environmental Monitoring
Satellite imagery	
Information sharing platforms	Management and Information Sharing
Customs and document management systems	
Digital document archiving	

6 Picture. Different technologies ship agents use.

The technologies used by the ship agent relate to technological systems, weather and environmental monitoring technology, and management and information-sharing technology.

- What skills, expertise, and qualities are required to succeed in the work of a ship agent?

Logistics expertise	Competence
Organizational skills	
Language skills	
Communication skills	
Effective teamwork	Cooperation
Ability to handle stress	
Collaboration	
Information sharing	

7 Picture. Theming the skills, expertise, and qualities of a ship agent.

The ship agent's required skills, expertise, and qualities could be divided into two themes, competence and cooperation.

- What are the most common challenges a ship agent faces in their work?

Delays	Operational Challenges
Schedule changes	
Congestion	
Equipment failures	
Damage to cargo or vessel	Logistical Challenges
Customs and import challenges	
Language barriers	Communication and Cultural Challenges
Cultural differences	

8 Picture. Most common challenges a ship agent faces.

The challenges faced by the ship agent in their work include issues related to ship and port operations, logistical challenges, and challenges related to language barriers and cultural differences.

- And how are those challenges overcome?

Good planning	Planning and Proactive Action
Proactive action	
Good communication skills	Communication and Collaboration
Flexibility	
Collaboration	
Problem-solving skills	Problem-Solving Ability

9 Picture. How ship agent overcomes the challenges.

The ship agent overcomes work challenges with planning and proactivity, good communication and collaboration skills, and the ability to solve problems.

- How does a ship agent handle situations such as damages or delays in the port?

Report the incident to relevant parties (e.g., shipping companies and stakeholders)	Damages
Arrange inspections if necessary	
Coordinate damage assessments with experts	
Provide all necessary information to the involved parties	
Report the delay to relevant parties (e.g., shipping companies, customers, and other stakeholders)	Delays
Coordinate alternative arrangements.	
Request additional time from the port if required	
Keep all parties informed about the situation	

10 Picture. Handling damages and delays in a port.

Image 10 lists ways in which the ship agent handles potential damage situations and delays in the port.

## **6 RESULTS**

As a result of the content-based interpretation and analysis of the data, main themes related to the research questions were identified. These main themes are detailed below, organized by each question.

### **6.1 Role of a ship agent in a port and tasks involved**

The role of a ship agent in a port can be understood through two main themes. In this thesis, the primary themes identified were collaboration and taking care of arrangements.

The ship agent collaborates with the port, principals, and various authorities. The ship agent's role is always to represent the shipping company. One important responsibility of the ship agent is to provide information about local laws and regulations to the relevant parties. Additionally, the ship agent coordinates the arrival and departure of ships as well as the entire port visit in cooperation with partners.

The ship agent ensures that the port visit for arriving ships proceeds properly. This includes receiving the ship at the correct berth upon arrival at the port. During the ship's stay, the ship agent takes care of the crew's needs at the captain's request and arranges any necessary port or other services. Taking care of arrangements also involves handling cargo operations, such as the delivery and receipt of cargo on behalf of the cargo owner.

### **6.2 Partners and stakeholders of a ship agent**

This thesis revealed that a ship agent works with a wide range of partners. These partners are closely connected to the port and its infrastructure. They include various ports, stevedoring companies, pilots, ice-breakers, and tugboat operators.

Similarly, ship agents collaborate with parties involved in transportation services, such as shipping companies, ship captains, crew members, as well as transport and logistics companies. Additionally, the role of a ship agent involves working with authorities and legal professionals.

When necessary, cooperation also extends to provisioning companies and various service providers, such as electricians and healthcare professionals.

### **6.3 Technology used by a ship agent**

A ship agent's work is mostly independent and relies heavily on different types of technology. Ship agents use information-sharing platforms to communicate with Finnish customs, ship captains, shipping companies, and other partners. They also use real-time tracking systems to see exactly where the ship is located.

To prepare for a ship's arrival, ship agents check sea and weather forecasts, which provide important details about Finland's weather and water conditions. This helps them make sure the ship can safely enter the port without any issues, such as shallow waters. In some cases, ship agents also use satellite images to review the layouts of different ports.

Ship agents also rely on automated booking and payment systems to handle invoices and payments for the various services involved.

### **6.4 Skills, expertise, and qualities in the work of a ship agent**

While speaking additional languages is a bonus, English is a must for a ship agent, as it's needed daily for international communication. A ship agent must also be familiar with shipping terminology and abbreviations.

Since a large part of the job involves organizing the ship's port visit, strong organizational skills and logistics knowledge are essential. The

role requires working with many different people, so communication skills and the ability to work well with others are very important.

Ship agents often deal with significant amounts of money, make important decisions, and handle time-sensitive tasks, so being able to manage stress is also crucial.

### **6.5 Challenges a ship agent faces and how to overcome them**

The challenges a ship agent faces are often related to the ships themselves, their operations, logistics, and interactions between people, such as cultural differences and language barriers.

Challenges related to the ships and their port visits include delays and other schedule changes, congestion, and potential equipment failures at the port. Logistics challenges include issues with customs clearance, import problems, or cargo and ship damage.

All these challenges can slow down the port visit and addressing them is often difficult or time-consuming for the ship agent.

In their work, a ship agent tackles challenges through careful and proactive planning, strong collaboration skills, and problem-solving abilities. With clear communication, flexibility, and a cooperative attitude, a ship agent is often able to resolve unexpected issues that arise.

### **6.6 Damages or delays handled by a ship agent in the port**

In cases of damages or delays, a ship agent's tasks can be summarized as reporting, arranging, coordinating, and informing. For damages, the ship agent first reports the incident to the relevant parties, such as the shipping company and other stakeholders. Then, they arrange inspections, if necessary, coordinate damage assessments with experts, and ensure that all involved parties receive the required information.

For delays, the ship agent informs all relevant parties and coordinates necessary adjustments based on the new schedule. The port is notified and, if needed, a request for additional time is made. All parties are then updated on the revised schedules.

## **7 REFLECTION**

Qualitative methods, including questionnaires and observations, were used to gather information for this research. Even though the sample size was small, valuable insights were gained. Observing ship agents at work and information given by them about their work duties and requirements provided a clearer understanding of their daily tasks and challenges at the client company's work environment for ship agents. Excel was used to organize and analyze the data, and AI helped refine the text and convert certain sections from Finnish to English.

It was found that teamwork is important for a ship agent. They often work with port authorities, shipping companies, and service providers to ensure that everything runs smoothly. Koivumäki also emphasizes the importance of cooperation and its increase in the future work of ship agents (Koivumäki 2019, 44). On the other hand, technology also plays a big part in their work, helping them track ships, schedule tasks, and manage communication more efficiently.

The research also showed that certain skills and qualities are needed to succeed in this role. Good communication, problem-solving, and staying calm under pressure are all important. Since the job involves tight deadlines and unexpected challenges, being organized and adaptable is necessary.

## **8 CONCLUSIONS**

### **8.1 The significance of the results**

This study explored the role of a ship agent during a port call in maritime cargo transport. The findings show that the job of a ship agent is complex and requires working closely with the crew, port authorities, and service providers. A smooth port call depends on how well the agent handles tasks like communication, paperwork, and organizing services. The research shows that ship agents play an important role in making sure that port operations run well, and maritime transport is successful.

The client company can use the results of this research in onboarding new employees. Those interested in the work of ship agents more broadly can also benefit from the findings of this study. In possible future changes in the field, such as due to digitalization, the information produced by this research can be used when redesigning the ship agent's job description.

### **8.2 Limitations of the research**

There are some limitations to this research. First, the research was based on data from just one company, Aava Shipping, so it may not fully represent the experiences of ship agents in other companies or locations. Also, looking for sources/references to this research there was not many recent academic sources on this topic, and most of the references available were quite old. Because of the limited amount of available up-to-date information of the topic, the depth of this research findings may have its limitations.

### **8.3 Suggestions for Future Research**

Future research goals for this topic could involve gathering data from more shipping companies or different regions to better understand the overall role of ship agents. In the future, the ship agent's work is also likely to become broader, requiring the handling of various types of vessels, such as cruise ships, foreign state vessels, commercial cargo ships, and even sailing boats, in port clearance procedures. This change would affect the ship agent's work, demanding increasingly broader expertise (Koivumäki 2019, 44-45). Researching how new technologies, like digital tools and automation, are changing the job could provide more insight into how port operations are evolving. The significance of technology will grow in the future, thus impacting the work of ship agents, although it is still difficult to assess the full effects of this change. Technological innovations, such as remote services, will become possible, and these services will also change the pricing of ship clearance procedures (Koivumäki 2019, 43). It would also be interesting to investigate the financial and legal challenges that ship agents face.

## 9 REFERENCES

- Finlex. (2023). Luotsauslaki. Retrieved 26.12.2024 from <https://finlex.fi/fi/laki/alkup/2023/20230561>
- Finnpiilot. (n.d.). Order a pilot/pilot online. Retrieved 20.12.2024 from <https://finnpilot.fi/en/for-customers/order-a-pilot-pilot-online/>
- Finnpiilot. (n.d.). Mitä luotsaus on?. Retrieved 25.12.2024 from <https://finnpilot.fi/luotsaus/mita-luotsaus-on/>
- International Institute of Marine Surveying. (2014) The role of stevedore in shipping. Retrieved 10.12.2024 from <https://www.iims.org.uk/the-role-of-stevedores-in-shipping/>
- Grönroos, Christian. (2015). Service Management and Marketing: Managing the Service Profit Logic. John Wiley & Sons Ltd., Fourth Edition.
- Koivumäki, M. (2019). Laivanselvityspalveluiden nykytilanne ja näkymät Suomessa. Publications of The Hazard Project 27:2019. Retrieved 02.02.2025 from <https://blogit.utu.fi/hazard/wp-content/uploads/sites/65/2019/03/HAZARD-publication-27-Laivanselvityspalveluiden-nykytilanne-ja-nakymat-Suomessa.pdf>
- Kylmä, J. & Juvakka T. (2024). Laadullinen terveystutkimus. Edita, Bookwell Oy, Porvoo.
- Logistiikkamaailma. (2024a). Satama. Retrived 10.12.2024 from <https://www.logistiikanmaailma.fi/logistiikan-toimijat/satama/>
- Logistiikanmaailma. (2024b). Linjaliikenne. Retrieved 12.12.2024 from <https://www.logistiikanmaailma.fi/kuljetus/merikuljetus/linjaliikenne/>
- Logistiikanmaailma. (2024c). Hakurahtiliikenne. Retrieved 12.12.2024 from <https://www.logistiikanmaailma.fi/kuljetus/merikuljetus/hakurahtiliikenne/>

- Logistiikanmaailma. (2024d). Kuiva irtolasti. Retrieved 18.12.2024 from: <https://www.logistiikanmaailma.fi/kuljetus/merikuljetus/kuivat-irtolastit/>
- Logistiikanmaailma. (2024e). Alustyyppit. Retrieved 18.12.2024 from: <https://www.logistiikanmaailma.fi/kuljetus/merikuljetus/alustyyppit/>
- Logistiikanmaailma. (2024f). Laivanselvittäjä, laivameklari ja konttivarustamot. Retrieved 16.12.2024 from <https://www.logistiikanmaailma.fi/kuljetus/merikuljetus/laivanselvittaja-ja-laivameklari/>
- Logistiikanmaailma. (2024g). Huolintaan liittyviä asiakirjoja. Retrieved 20.12.2024 from <https://www.logistiikanmaailma.fi/logistiikan-toimijat/huolinta/huolintaan-liittyvia-asiakirjoja/>
- Logistiikanmaailma. (2022a). Huolitsia ja tullaustoiminta. Retrieved 18.12.2024 from <https://www.logistiikanmaailma.fi/logistiikan-toimijat/huolinta/huolitsija-ja-tullaustoiminta/>
- Logistiikanmaailma. (2022b). Merikuljetusasiakirjat. Retrieved 20.12.2024 from <https://www.logistiikanmaailma.fi/kuljetus/merikuljetus/merikuljetusasiakirjat/>
- Logistiikanmaailma. (2017). Ulkomaankaupan sähköiset ilmoitukset. Retrieved 28.12.2024 from <https://www.logistiikanmaailma.fi/kauppa-tullaus/ulkokauppa/ulkokaupan-sahkoiset-ilmoitukset/>
- Lokin, J. (2022). Integration of a port approach in the port call. Retrieved 10.12.2024 from [https://repository.tudelft.nl/file/File\\_c7188d0c-f5b6-4dc5-a81c-a29be5bcc80f?preview=1](https://repository.tudelft.nl/file/File_c7188d0c-f5b6-4dc5-a81c-a29be5bcc80f?preview=1)
- PortActivity. (2024). Retrieved 13.12.2024 from <https://portactivity.fi/>

- Saaranen-Kauppinen, A. & Puusniekka, A. (2006). KvaliMOTV – Menetelmäopetuksen tietovaranto [verkkójulkaisu]. Yhteiskuntatieteellinen tietoaarkisto. Retrieved 25.01.2025 from <https://www.fsd.tuni.fi/menetelmaopetus/kvali/viittausohje.html>
- Tapaninen, U. (2019). Merenkulun logistiikka. Otatieto.
- Tietoaarkisto. (n.d.). Laadullinen tutkimus ja Teoria. Retrieved 02.02.2025 from <https://www.fsd.tuni.fi/fi/palvelut/menetelmaopetus/kvali/mita-on-laadullinen-tutkimus/laadullinen-tutkimus-ja-teoria/>
- Tietoaarkisto. (n.d.). Laadullinen sisällönanalyysi. Retrieved 02.02.2025 from <https://www.fsd.tuni.fi/fi/palvelut/menetelmaopetus/kvali/analyysitavan-valinta-ja-yleiset-analyysitavat/laadullinen-sisallanalyysi/>
- Traficom. (2024a). PortNet. Retrieved 28.12.2024 from <https://www.traficom.fi/fi/liikenne/merenkulku/portnet>
- Traficom. (2024b). Ice Classes of Ships. Retrieved 27.12.2024 from <https://www.traficom.fi/en/transport/maritime/ice-classes-ships>
- Traficom. (2021a). Vesiväylien syvyyskäytännön periaatteet ja soveltaminen. Retrieved 26.12.2024 from <https://www.traficom.fi/sites/default/files/media/file/SYV-YYSOJJE FI 2021 11 01.pdf>
- Traficom. (2021b). Vesiliikennelain mukaiset kiellot ja rajoitukset. Retrieved 25.12.2024 from <https://www.traficom.fi/fi/liikenne/merenkulku/vesiliikennelain-mukaiset-kiellot-ja-rajoitukset>
- Tulli. (2024). Tavarunioniasema. Retrieved 24.12.2024 from <https://tulli.fi/yritykset/kuljetus/unioniasema>
- Tulli. (2018). Tullin määräys 3/2018: Suomen satamiin saapuvia ja Suomen satamista lähteviä aluksia koskevasta ilmoitusmenettelystä. Retrieved 28.12.2024 from <https://tulli.fi/-/tullin-maarys-3-2018-suomen-satamiin-saapuvia-ja-suomen-satamista-lahtevia-aluksia-koskevasta-ilmoitusmenettelysta>

- Väylä. (2024). Winter Navigation. Retrieved 27.12.2024 from <https://vayla.fi/en/transport-network/waterways/winter-navigation>