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**WORLD MARITIME UNIVERSITY**

**Malmö, Sweden**

**AN ANALYSIS OF THE NEED FOR A PILOT  
CIVIL LIABILITY RESTRICTION SYSTEM IN  
SOUTH KOREA FOR MARINE SAFETY**

By

**JAE-KUN LIM**

**The Republic of Korea**

A dissertation submitted to the World Maritime University in partial  
Fulfillment of the requirements for the award of the degree of

**MASTER OF SCIENCE**

**In**

**MARITIME AFFAIRS**

**(Maritime Safety & Environmental Administration)**

**Class of 2018**

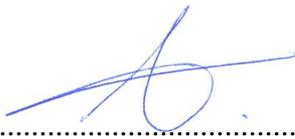
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## DECLARATION

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

(Signature):



.....

(Date):

2018.9.18

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MLP

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I wish all WMU professors and students will be brighter and healthier in the future.

## ABSTRACT

**Title of Dissertation:** AN ANALYSIS OF THE NEED FOR A PILOT CIVIL LIABILITY RESTRICTION SYSTEM IN SOUTH KOREA FOR MARINE SAFETY

**Degree:** MSc

In this dissertation, I analyse the current status and problems of the civil liability of the pilot and propose a solution. The purpose of this is to enhance maritime safety and harbour efficiency.

Since pilot services have uniquely high risks, pilots have limited civil liability in Asian countries such as Singapore and Vietnam as well as European countries such as the UK and France. Unusually, however, South Korea still lacks such a legal system, and pilots are responsible for criminal, administrative and civil liability related to marine accidents. This sometimes results in the individual being held responsible for the damage that the pilot can not solve. This unique situation in Korea can lead to inefficiency of ports due to the conservative service of pilots. If pilots emphasize too much on safety, port competitiveness will naturally fall. There are many other problems due to the legal inadequacy.

In order to improve these legal imperfections, it is necessary to review the current status of pilots in South Korea and the related problems. The Korean government maintains maritime safety through the improvement of the pilot system. Sometimes there are improvements in good institutions, but if the laws are insignificant, the improvement is also meaningless.

Therefore, in this dissertation, the restriction of civil liability for pilots is proposed.. Through this, it can be said that the main purpose is to improve maritime safety and harbour efficiency. Pilots are a valuable resource for securing marine safety and harbour efficiency, and improving the pilot system is an important factor in reducing maritime accidents.

**KEYWORDS:** Pilot, Civil Liability, Pilotage Act, Compulsory Pilotage Area

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## LIST OF ABBREVIATIONS

CLC	International Convention on Civil Liability for Oil Pollution Damage
FUND	International Fund for Compensation for Oil Pollution Damage
HNS	International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea
IMO	International Maritime Organization
IMPA	International Maritime Pilots' Association
KMPA	Korea Maritime Pilots' Association
KIMFT	Korea Institute of Maritime and Fisheries Technology
KMI	Korea Maritime Institute
KMST	Korean Maritime Safety Tribunal
LLMC	Convention on Limitation of Liability for Maritime Claims
NUCLEAR	Civil Liability in the Field of Maritime Carriage of Nuclear Material
WRC	Nairobi International Convention on the Removal of Wrecks
P&I	Shipowners' Protection and Indemnity Insurance
PAL	Carriage of Passengers and their Luggage by Sea

## 1. Introduction

### 1.1 Background and Purpose

Korean pilots are typically former professional licensed seafarers who have worked at sea for many years before obtaining a pilot license. Pilots with such long-term maritime experience have great pride in their work in a difficult environment, and after finishing their work safely, the Captain's words "Good job, Captain!" or "Well done, Mr. Pilot" are a great reward (KMPA, 2010). Under Article 2 -(1) of the Pilotage Act of Korea, "Pilot" means a person who has been issued a pilot's license qualifying him/her to engage in pilotage services in a specific pilotage area. The purpose of establishing a pilotage area and placing pilots there is also specified in Article 1 of the Pilotage Act. The pilot system contributes to promoting the safe navigation of ships in the pilotage area and to efficiently managing harbours by prescribing matters necessary for pilot licensing and pilotage in the pilotage area.

Pilot work is traditionally carried out within the waters of the exclusive sovereignty of a nation. It is very strong in terms of regional characteristics and is regulated under the responsibility of the country concerned. Many countries, including those in Europe and the United States, consider pilot systems to be quasi non-governmental organizations or public-level services (KMI, 2014). Therefore, the pilotage standard is created from the viewpoint of how the pilot can protect the citizens, the environment, the economy, and the port facilities from maritime accidents (KMPA, 2010). In a real sense, the people and the government can be said to be the beneficiaries of the pilot service, and in this respect, the compulsory pilot system is the sovereign right of the country to regulate foreign vessels in its territorial waters (Kim, Kim, Lee, & Park, 2015). Therefore, for the purpose of the original pilot system, it is a principle that a pilot should be aboard every ship operating in the pilotage area so as to prevent marine casualties among the unspecified number of vessels using the territorial waters. However, according to the infrastructure investment for maintaining the pilot system and the situation of each port, it is operated flexibly by dividing it into a compulsory pilotage area and an discretionary pilotage area (IMPA 2014). The reason for adopting the compulsory pilot system is primarily for the purpose of port and ship safety, but also includes ① harbour efficiency improvement ② environmental protection ③ national security reasons, and ④ political and economic considerations. Thus, in any case, pilots are required to be familiar with the hardware aspects of vessels and harbours as well as software aspects such as harbour operation systems and

related laws and regulations (Lee, Lee, & Kim, 2017). As such, pilots are port managers who must be responsible for efficient and safe port operations within the port. They are also diplomats who welcome the crew to the port of entry. In addition, pilots have a professional and public interest status due to their specialized occupation, which requires expertise in ship navigation and strong physical strength. Because of this specificity, each country has enacted a separate pilotage act that reflects the characteristics of its own country and stipulates pilot qualifications and pilot work in the pilotage area in accordance with this act (Jeon, Kim, Ji, & Kim, 2017)

These pilot systems are challenged today. In particular, modern ships have become large-scale, specialized, and automated. In order to smoothly operate these ships in the narrow waters of a harbour, pilots need to know the ship well, acquire expert knowledge including the surrounding conditions of the harbour, and have experience in the maritime field. However, while ships are becoming larger, more specialized and automated, investment in infrastructure in port construction and facilities is insufficient compared to the demand of port users. Therefore, pilots must force large vessels to enter ports through narrow channels with insufficient water levels. Moreover, pilot users are increasingly demanding pilotage even in the worst of weather or sea conditions. For this reason, it is possible for maritime accidents caused by pilots' minor or grave mistakes to cause great disasters. In particular, in the case of marine accidents caused by Korean pilots, the responsibility of criminal, administrative and civil liability is overloaded on pilots, which causes a considerable psychological burden on the pilots. This is one reason why pilots are suffering from anxiety about maritime accidents, resulting in a decline in port operation efficiency (KMPA, 2010). In general, it is becoming a common practice not to overburden pilots with civil liability if marine accidents caused by pilots occur. This is because the burden of civil liability on pilots will force pilots to insure themselves, resulting in an increase in the pilotage rate, which can weaken the competitiveness of the port (IMPA, 2014). In Korea, the restrictions on the civil liability of pilots are not clear in pilotage law, but the pilot agreement may set restrictions based on the pilot fees. However, if the pilot's conduct is intentional or grossly negligent, the pilot will usually not be fully protected (Kim, 2013).

Therefore, the main purpose of this study is to examine the problems of the pilotage system in Korea for marine safety and to prepare improvement measures after analyzing the problems. In particular, the issue of pilot civil liability restriction will be discussed. In other words, this study suggests effective ways to improve Korea's pilot system in the future to create new shipping and port conditions in the 21st century. Through this, the aim is to keep the traffic safety of

vessels in the best condition and to improve the efficiency of port operation in Korean ports and coasts.

## **1.2. Research methods and scope**

In order to achieve the purpose of this study, this dissertation summarizes the scope of the task in the following six broad categories.

- Chapter 1: Introduction
- Chapter 2: Korea's pilot system and problems
- Chapter 3: Captains and pilots' roles and legal responsibility
- Chapter 4: Laws related to the pilot's civil liability
- Chapter 5: A plan to restrict pilots' civil liability
- Chapter 6: Summary and conclusion

Considering the scope of the above tasks, the success or failure of this study depends on the current status of the pilot system and the problem analysis. Therefore, a questionnaire survey of stakeholders along with an analysis of case studies of other countries and literature were the core research methods for accurate status and problem analysis. Based on these analysis methods, this dissertation consists of 6 chapters. Chapter 1 is the introduction. Chapter 2 theoretically examines the Korean pilot system. Through this reviews, it seeks to redefine the functions, roles and responsibilities of pilots in the 21st century. Subsequently, the pilot survey conducted by the Korean Shipowners' Association (as the current pilot user) is analyzed. Chapter 3 reviews the legal status and responsibilities of pilots and captains. Chapter 4 identifies issues related to the pilot civil liability restriction system. After that, the pilot systems of major shipping countries are compared and the improvements to Korea's pilot system are discussed. In Chapter 5, The practical application of the pilot's civil liability system will be proposed. Finally, Chapter 6 summarizes the results of the study and concludes the report by presenting the proposed improvements.

## 2. Korea's Pilot System and Problems

### 2.1. Status of the Pilot System in Korea

Pilotage is one of the major safety services provided by the port, and it is an important factor in determining the quality of port services as well as safety at port. Therefore, in order to secure the safety of the port and to improve the efficiency of the port operation, it is obligatory for all the vessels entering and leaving the port to board a pilot (Pilotage Act Article 20 (2)). In order to ensure that pilot operations are operated smoothly in ports, countries around the world have constructed various pilot systems that are suited to their own conditions, as shown in Table 1 (KMI, 2014).

(1) The free operation system is a pilot system that is operated by its own organization or type of organization, such as a union. The system recognizes maximum autonomy in discretionary pilotage areas, or sea areas where pilotage is possible without a pilot license. However, these systems exist only in a modified or somewhat limited form in terms of publicness, safety of ships and ports, and prevention of marine pollution. This is because the free competition system for pilots causes many accidents.

(2) The national public system is a system in which the state or the port authority provides pilot service, and the public interest and the prevention of marine pollution are an important aim. Therefore, the pilot is given a status equivalent to a civil servant, and the pilot receives a salary as a national or public pilot agency employee.

(3) The mixed operating system is a form in which pilots provide pilot services through organizations such as the pilot association, overseen by the public sector. It is the most universal pilot system in the world, and it can be said that Korea's pilot system is also a compromise system.

Division	Advantages and Disadvantages	
	Advantages	Disadvantages
Free Operating System (Free contract)	<ul style="list-style-type: none"> <li>• Ensures maximum professional autonomy of pilot</li> <li>• Reduces burden on pilot users and improves service quality</li> </ul>	<ul style="list-style-type: none"> <li>• As the pilot user selects a particular pilot, overload is accumulated in some pilots</li> <li>• Pilot supply and demand cannot be adjusted according to market function</li> </ul>
National public system (National control)	<ul style="list-style-type: none"> <li>• Best for securing public interest and protecting the environment</li> <li>• Ensuring fairness of pilot supply and demand system</li> </ul>	<ul style="list-style-type: none"> <li>• If a maritime accident is caused by the pilot, the state is responsible for a large amount of compensation</li> <li>• Inadequate consumer-oriented service due to bureaucratization</li> </ul>

	<ul style="list-style-type: none"> <li>• Effective coordination between port authorities and pilot authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to obtain good pilots due to low income</li> </ul>
Mixed operating system (Compromise system)	<ul style="list-style-type: none"> <li>• Enables autonomous pilot activities and effective management oversight of the country</li> <li>• Guaranteed high income and reliable pilot service</li> <li>• Effective coordination between port authorities and pilot authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult supervision of pilot work from time to time</li> <li>• Concerns about pilot user complaints due to monopolization of pilot service</li> </ul>

Table 1. Advantages and Disadvantages of the Pilot System and Adoption Countries (Source: KMI)

Advantages of the compromised pilot system include: ① adequate autonomy and supervision of the public sector to provide high-quality pilot services and efficient port operations, ② The quality of the pilot service can be improved by stable pilot income. ③ It is possible to provide a stable supply of pilot services through the public sector supply and demand plan. The disadvantages of this system are as follows: ① Pilots in a monopoly position may be overpowered. ② The pilot user's request may be ignored. In addition, the characteristics of the Korean pilot system are as follows: ① The system takes the form of individual enterprise like other professions in Korea. ② The pilot organization by individual union type maintains a monopoly system. ③ The responsibility of criminal, administrative, and civil liability for various marine accidents cannot be avoided.

The most important institutional support for the smooth operation of the pilot system is the pilotage act, and various official notices. In the case of Korea, the pilot system is operated through a pilotage agreement, pilotage tariff, Korea Pilot Association's articles of incorporation and regulations, and Korea Pilot Operation Council operation regulations. Among them, the Pilotage Act is the most fundamental and important part of the pilot system (KMPA, 2010).

## **2.2. Purpose and Legal System of the Pilot System**

### **2.2.1. Purpose and Key Concepts**

The basic purpose of the Korean pilot system is to ensure the safety of the ship in the port area or pilotage area and to contribute to the efficient operation of the port according to the 'Pilot Act Article 1 (Purpose)'. The definition of “pilot” and “apprentice pilot” as the main concepts of the pilot system are stated as follows.

- Pilot: Pilot in the pilotage area to board the ship and guide the ship to a safe channel.
  
- Apprentice pilot: A person who has passed a pilot test conducted by the Ministry of Ocean and Fisheries and is placed in a certain pilotage area and has received practical training as a pilot.

### **2.2.2. The Legal System of the Korean Pilot System**

The legal system of the pilot system in Korea is the Pilotage Act, and the subordinate statutes are the enforcement ordinance and the enforcement regulations. The Pilotage Act, enacted as Law No. 812 on December 6, 1961, resulted in a total of twenty-eight revisions, which greatly relaxed the regulations and created the autonomous and advanced legal system. However, there are still a number of deficiencies in the rapidly changing shipping industry and port conditions (Jeon, Kim, Ji, & Kim, 2017)

The main contents of the current Pilotage Act are as follows.

- ① A person who wishes to become a pilot must board a ship with a gross tonnage of 6,000 tons or more as a captain for at least five years.
- ② The Pilotage Act stipulates the compulsory pilot, pilot exemption, prohibition of discriminatory pilotage, pilotage fees, safety measures at the time of boarding and pilot boats.
- ③ By establishing a pilot operation council, it provides penalties for those who violate the pilot law, thereby improving the pilot system and facilitating its operation.

## 2.3. Maritime Accident by Pilot

### 2.3.1. Status of Maritime Accidents and Pilot Accidents

The status of maritime accidents and pilots' accidents are summarized for five years from 2013 to 2017. The current status of accident is as follows.

Year	Total	2013	2014	2015	2016	2017
<b>Maritime accidents</b>	9,413	1,093	1,330	2,101	2,307	2,582
<b>Accident caused by pilot negligence</b>	38	4	8	5	10	11

Table 2. Status of marine accident and pilot accident (Source: KMST)

As can be seen in Table 2, maritime accidents and pilot negligence are steadily increasing. The causes of accidents reported by KMST are that mostly human errors. Non-compliance with the principles of navigation, and neglect of vigilance are the most common except for simple engine failure.

### 2.3.2. Pilot Disciplinary Status

Pilot disciplinary status is shown in Table 3 for five years from 2013 to 2017. The discipline for pilots is getting stronger.

Year	2013	2014	2015	2016	2017	Total
<b>Cancel license</b>	-	-		-	-	0
<b>Business suspension</b>	1	4	1	2	3	11
<b>Reprimand</b>	2	2	1	4	1	10
<b>Total</b>	3	6	2	6	4	21

Table 3. Pilot disciplinary status (Source: KMST)

According to KMST, the main causes of pilot accidents were speeding, navigation violations, and pilot negligence. In particular, accidents caused by pilots who are experts in navigation are often major accidents. A typical example is the 'Wu Yi SAN' Vessel accident that occurred in Korea in 2014. The main cause of the accident was speeding by the pilot. This accident spilled a lot of oil (926~1025.3 kl), The GS company suffered over 90 million USD in damage, and the marine environment was seriously destroyed. Everyone can make mistakes. The pilot can also cause an

accident because they are human (IMPA, 2014). However, before another such accident occurs, it is important to identify and improve the problem in advance.

## **2.4. Problems of the Korean Pilot System**

### **2.4.1. Recognition of Problem**

The Pilot testing and licensing system, pilot legal system, port safety management and pilot system, pilot rate system and pilot deregulation are reviewed by Korea Maritime Pilot's Association for improvement of the pilot system for maritime safety. However, in order to identify more objective problems, the problems of the current pilot system are investigated through a questionnaire conducted by the Korean Shipowner's Association, the pilot user.

### **2.4.2. Questionnaire Survey Method**

The Korean Shipowner's Association, which has 157 shipping companies as members, conducted pilot service evaluations for maritime safety from May 1 to July 31, 2018. A questionnaire form was distributed to captains of international ships using the Korea pilot service. A total of 178 questionnaires were analyzed quantitatively.

### **2.4.3. Major Evaluation Contents**

The evaluation was largely divided into ① pilot service satisfaction and ② procedural act and compliance with the passage plan.

(1) Pilot service satisfaction includes: words and actions, communication, equipment operation within the ship, dress, relationship with the captain, and overall service.

(2) Procedural act and compliance with the passage plan includes: boarding and leaving a ship area compliance, provide and explain the passage plan, compliance with the passage plan, use of cell phone (Private use).

#### 2.4.4. Pilot Service Evaluation Results Analysis

##### (1) Pilot Service Satisfaction

The score was divided into very satisfied (100 points), satisfied (80 points), average (60 points), dissatisfied (40 points) and very dissatisfied (20 points). Each score was assigned accordingly. The scores are as follows: (a) What were the words and actions of the pilot? 87 Points, (b) How was the pilot communicating with VTS, tug boat? 87 Points, (c) What was the operation of the pilot's vessel equipment? 87 Points, (d) What was your assessment of the pilot's outfit? 87 Points, (e) How was the cooperation between the pilot and the captain? 79 Points, (f) Was the role of the pilot and captain appropriate? 79 Points, (g) How was the overall service? 87 Points.

Evaluation items		Very Satisfied (100)	Satisfied (80)	Normal (60)	Dissatisfied (40)	Very Dissatisfied (20)	Evaluation score
Words and actions		99	46	32	0	1	87 Point
Communication		96	53	28	1		87 Point
Equipment operation within the ship		95	52	31			87 Point
Dress		94	54	30			87 Point
Relationship with captain	Cooperation	22	15	22	1		79 Point
	Role	22	14	24			79 Point
Overall service		98	50	26	3	1	87 Point

It can be seen that **the scores of communication and role of the captain are below average compared to other items**. According to the survey, the main reason for this is that most Korean pilots basically perceive the relationship between the captain, the crew and the pilot as a vertical relationship.

(2) Procedural act and compliance with the passage plan.

The score was divided into Yes, No, I do not know. Scores were given to each of the following items: procedural act and compliance with the passage plan: Boarding and leaving a ship area compliance, provide and explain the passage plan, compliance with passage plan, use of cell phone (private use). The following results were obtained. (a) Did the pilots comply with the ship's boarding and leave areas? **98%**, (b) Did the pilot provide the passage plan? **83%**, (c) Did the pilot explain the passage plan? **91%**, (d) Did the pilot follow the passage plan? **95%**, (e) Did the pilot use their cell phone privately during work? **94%**. According to the survey, most of the survey items were evaluated well, but the passage plan was not enough provided.

Evaluation items	YES	NO	Not Know	Compliance rate
Boarding and leave a ship area compliance	173	4		98%
Provide the passage plan	147	31		83%
Explain the passage plan	137	14		91%
Compliance with passage plan	168	1	7	95%
Use of cell phone (Private use)	167	9	2	94%

#### 2.4.5. What the Pilot System Should Improve in the Future

A comprehensive analysis of Pilot Service Evaluation shows that the most immediate improvement is to improve **the relationship between the captain and the pilot**. It is often the case that the captain does not inform the pilot of the proper character of the ship, or that the pilot does not provide the captain with proper local information, so the cooperation and role relationship are not clear. Indeed, this is often the case in maritime accidents. Therefore, the next chapter will concentrate on the role of the captain and pilot for marine safety, and make an improvement on this.

### **3. Captains and Pilots' Role and Legal Responsibility**

#### **3.1. Captain's Legal Authority and Duty**

The captain is the chief executive officer of the ship and has the authority and responsibility for the safety of the ship and human life in accordance with the provisions of the seafarers' act, the commercial act, the ship safety act, and the criminal procedure act. According to the Korean Seafarers' Act, the captain has the following authority and duties:

##### **3.1.1. Captain's Authority**

(1) The captain is the chief executive officer of the ship, commanding and supervising the crew, and making the necessary orders for those on board (rights to command and order). (2) The captain can discipline a crew member who does not obey the prescribed rules of the ship (disciplinary power). (3) The captain may forcibly dispose of the crew if the crew does not leave the ship after the termination of the boarding contract (force of control). (4) The captain may investigate a crime or arrest an offender in the ship (duties as judicial police officer).

##### **3.1.2 Captain's Duty**

(1) The captain shall inspect the ship for its seaworthiness before departing from port and check that the ship is equipped with appropriate equipment, personnel, food, and fuel (inspection duty before departure from port). (2) The captain shall depart immediately when preparation for the voyage is completed, and shall navigate to the port of destination without changing the planned route unless it is unavoidable (navigation along planned sea route). (3) The captain shall not leave the ship from the time the shipment of the cargo or the boarding of the passenger begins until the cargo is unloaded and the passenger's disembarkation from the ship is completed (duty to stay onboard a ship). (4) The captain shall command the ship directly when the ship

enters and leaves the port, when the ship passes through a narrow channel, and when the ship is at risk (direct command duty). <sup>(5)</sup> When there is imminent danger to the ship, the captain shall take all necessary measures to rescue human lives, the ship and cargo (obligation of measures in case of ship danger).

Therefore, the captain must manage the cargo, crew, and passengers safely and operate the ship safely and efficiently. In addition, the captain is responsible for compliance with local acts and international law, as well as the policies of the ship's company and the flag state. All crew members, including crew, passengers, and pilots are under the command of the captain, who is ultimately responsible for them (Rodriguez, and Hubbard, 1998). However, complicated legal problems arise when pilots board ships and perform pilot work.

## **3.2. The Legal Status of the Pilot and the Relationship between the Pilot and the Captain**

### **3.2.1 Pilot's Legal Status**

Pilots have different legal status, depending on whether the pilot is a simple technical advisor to the captain or a ship commander on behalf of the captain. The former is called an operational assistant pilot, and the latter is called an operational commander pilot. There is no dispute in the discretionary pilotage areas that the pilot is an operational assistant pilot. However, controversy arises in the compulsory pilotage areas from the issue of liability for damages. According to the operational command pilot theory, the pilot is independent of the captain and the owner of the ship; the captain and the owner of the ship are not liable for the pilot's actions because it is a typical delegation contract (Korea P&I Club, 2000). This theory, however, is inconsistent with the legislation of many countries and international conventions. In most countries, the pilot is seen as an operational assistant pilot (IMPA, 2014).

Article 18 (5) of the Korean Pilotage Act stipulates that 'Even when a pilot is piloting a ship, the Captain shall not be exempt from the responsibility to safely operate the ship, nor shall his/her authority as captain be infringed'. Furthermore, Article 2 of the Korea Pilot Agreement stipulates that '① A pilot shall faithfully perform his duties of piloting the vessel in the capacity of an adviser to the captain to contribute to the

efficient operation of the ship as well as to ensure the safety of traffic at sea. ② The rights and obligations of the captain for the safety of the ship shall not be altered by boarding a pilot'. This means that the legal status of a pilot is to be an advisor to the captain. In the technical aspect of ship operation, even if the pilot takes charge of the operation and command of the ship, the command of the ship belongs to the captain (TOREMAR, M., 1999). This legal status of the pilot should be maintained as it is in the compulsory pilotage areas

### **3.2.2 Relationship between Pilot and Captain**

According to IMO resolution A.285 (VIII): Notwithstanding the pilot's duties and obligations, the pilot's presence in the bridge does not relieve the officer of the watch of their obligation and duty for the safety of the ship. The officer should work closely with the pilot to accurately check the position and movement of the ship. If there is any doubt about the pilot's actions or intentions, the pilot should be asked for clarification. Nevertheless, when in doubt, the captain should be notified immediately and the necessary action should be taken before the captain arrives at the bridge. Moreover, Article 10 of the Korean Pilot Agreement stipulates that the captain and the pilot have the duty to cooperate: ①The captain shall ensure that the pilot's orders are carried out quickly and correctly by the officers and crew. ②The captain shall have the officers and crew keep continuous and careful lookout on his vicinity and immediately notify anything unusual to the pilot. ③The captain shall always have the engines of the vessel and anchors ready for use and shall co-operate with the pilot in using tugs and other means needed for safe pilotage.

According to Korea's precedent on this duty of cooperation, if the pilot boards the ship and the barge sinks due to the waves of the ship in operation, the pilot is negligent in operating the ship at excessive speed, and the captain has the same fault for not

properly observing. It is also the captain's duty to draw the attention of the pilot to any risk of accident due to high speed through a narrow channel. In this way, pilots and captains form a very close relationship and responsibility is often shared.

### **3.3. Pilot's Legal Liability**

Regarding the pilot's legal liability, pursuant to Article 18 (5) of the Pilotage Act, even when a pilot is piloting a ship, the captain shall not be exempt from the responsibility to safely operate the ship, nor shall his/her authority as captain be infringed. That being said, the pilot alone is not responsible for the accident. The pilot's liability issues are as follows.

#### **3.3.1. Pilot's Criminal Liability**

In the case of a marine accident caused by pilot intention or negligence, the Korean pilot is responsible for criminal responsibility. In accordance with the Marine Environment Management Act, pilots may be subject to criminal penalties for marine accidents. Pilots may be subject to criminal penalties if they spill oil with intent and negligence. A typical example is the Singapore-owned crude oil carrier 'Wu Yi SAN' Vessel accident. On January 31, 2014, the 'Wu Yi SAN' Vessel collided with a wharf facility while docking at GS Company Caltex 2 pier, causing oil (926~1025.3 kℓ) in the pipeline to leak into the sea. According to the KMST survey, the cause of the accident was revealed to be speeding by the pilot. The pilot was found guilty of negligence, and was sentenced to two years in prison under the Marine Environmental Management Act. The court said, "The pilot should do his best to operate the ship safely. However, he caused an accident due to negligence and caused a lot of oil to leak, resulting in 90 million USD in damage to the GS company and a major ocean pollution incident".

#### **3.3.2. Pilot's Administrative Liability**

Pilots are subject to administrative penalties if they cause, intentionally or by negligence, marine accidents. According to Article 9 (1) of the Pilotage Act, if a pilot

causes a maritime accident with intent or negligence, the Minister of Oceans and Fisheries may cancel the pilot's license or order the suspension of work within a period of six months. A representative example is the oil pollution accident caused by the 'Honam Sapphire Vessel' that occurred 13 years ago. As a result of the judgment of Korean Maritime Safety Tribunal, the pilot was suspended for two months and the pilot's license was cancelled based on Article 9 (1) of the Pilotage Act.

### **3.3.3. Pilot's Civil Liability**

In accordance with Article 750 of the Korean Civil Act, any person who has caused damage to another person by an unlawful act due to intent or negligence is liable for compensation for the damage. However, Article 18 (5) of the Pilotage Act stipulates only the responsibility of the captain, and the responsibility of the pilot is not explicitly stated. As a result, various controversies still arise over the civil liability of pilots in Korea (KIM, 2014).

### **3.4. Improving the Relationship between Pilot and Captain**

In order to operate a ship safely, it is necessary to know the ship well. The captain knows more about the ship than the pilot because the captain spends more time on the ship. However, the distinct advantage of the pilot compared to the ship's BRM team is that the pilot has a lot of knowledge of the pilotage areas. Pilots are familiar with shallow areas of the sea, the direction of the wind and its impact on the ship, and the flow of tides. The pilot also knows how to use marine navigation systems and electronic tools most effectively in the pilotage areas. The pilot and captain obviously have their own unique advantages, and it would be best to utilize the expertise of both for safe navigation of the ship. Therefore, cooperation between the pilot and the captain is necessary in the dangerous situation of the ship (Chakrabarty, 2016).

Furthermore, naturally, the relationship should have mutual respect and mutual trust, and the legal relationship should be clear. Unfortunately, according to the survey mentioned in Chapter 2, most pilots and captains find that there are many problems with communication and role definition. This is due to the vertical and rigid relationship

between the pilot and the captain, and has been found to be due to unclear legal relationships. There are many ways to improve the system, but clarification of the law is fundamental. In particular, the issue of civil liability of the pilot is still unclear and has become a source of controversy. Therefore, it is necessary to clarify the legal relationship of civil liability of Korean pilots.

## **4. Status and Legislation Case of Pilot Civil Liability System**

### **4.1. Global Trend of Civil Liability System**

Since shipping companies have a high level of risk associated with their activities, systems have been developed in many parts of the world that limit the responsibility of shipowners to maintain and develop maritime Industries. Since the Middle Ages in Europe, in 1734 in the United Kingdom, and in 1851 in the United States, the shipowner's liability has been limited. Today, almost all countries are limiting the responsibility of shipowners. The previous limitation of liability can also be found in the policy objective of developing the maritime industry, taking into consideration the risks and the large scale of the damage caused by shipping companies' activities (Choi, & Cho, 2010). Since the responsibility of the owner of the ship is limited in this way, if large-scale damage such as from a maritime accident occurs, the victim may not receive sufficient compensation. Therefore, IMO has adopted various conventions in order to resolve the mechanism of responsibility and compensation in an internationally unified way (Chen, 2012).

#### **4.1.1. IMO Civil Liability Convention**

The following are IMO conventions dealing with liability and compensation (IMO, 2018 a).

- 1 LLMC: The owner of the ship may be liable for the liability limit under Commercial Law, regardless of the cause of the claim.
- 2 CLC: This Convention determines the liability issues in the case of oil tanker oil spill accidents and establishes uniform international rules and procedures for proper compensation.
- 3 FUND: This Convention introduced a compensation system in which the marine industry and shippers share the responsibility for compensation for oil pollution damage caused at sea.
- 4 NUCLEAR: The purpose of this Convention is to resolve the responsibilities, problems and disputes of shipowners and operators of nuclear facilities when

accidents involving sea transport of nuclear material occur.

5 PAL: This Convention sets out the liability for damages to passengers on international vessels.

6 HNS: This Convention deals with compensation for accidents occurring during the sea transportation of fertilizer, nitric acid, or LNG.

7 Nairobi WRC: As an international shipwreck removal convention, it deals with wreck handling.

#### **4.1.2. The Role of the IMO Civil Liability Convention**

These IMO conventions have played a crucial role in securing the effects of safe international maritime transport and restoring environmental damage by reifying a concept of responsibility and compensation. These conventions also serve as deterrent measures to prevent damage from occurring. Most of these conventions limit their civil liability and compensation due to the risk or adventure inherent in the shipping industry. They also provide an internationally harmonized solution for the responsible systems and compensation that can be reasonably expected for large-scale maritime accidents (Choi & Cho, 2010).

### **4.2. Pilot Civil Liability Status**

#### **4.2.1. Pilot Civil Liability System of Major Countries and Ports in the World**

In the case of a pilot accident, most countries or ports are exempt or liability is limited to an amount equivalent to the pilotage fee. This is a system to protect pilots from claims for damages caused by maritime accidents because, in many cases, a large amount of damage is caused by a simple accident (Kim, 2014).

#### **4.2.2. Legislation Case for Pilot Civil Liability System**

(1) Korea and Japan: There is no provision that specifically limits the civil liability of the pilot. Therefore, the pilot is not protected against liability for tort. Particularly, when a marine accident occurs, a lot of costs are required to be borne by the pilot for the damage. For that reason, a controversy arises.

(2) USA: The US pilot system is divided into federal licensed and state licensed pilots. In addition, the pilot system is operated differently in each state (Thomas, 2004). In the case of a federal licensed pilot, autonomous operation is guaranteed to the maximum, but there is no restriction on civil liability in the event of an accident. However, most US pilots belong to a pilot company or a tug boat company, and the pilot company handles damages in the event of an accident caused by the pilot. In particular, in the case of the port of Los Angeles, the pilot belongs to the Port of Los Angeles, so the pilot does not bear civil liability in principle. However, if the amount of the accident caused by the pilot exceeds \$ 20,000, the accident must be investigated by the Coast Guard, and the result will be administrative punishment such as suspension of license or revocation of license. Moreover, under California law, liability insurance for pilots exists (Park, 2011).

(3) UK: The UK limits civil liability of pilots and pilot organizations to a certain amount. Therefore, the personal responsibility of the pilot is limited to [£ 1,000 + pilot fee] (Article 22 (1) of the UK Pilotage Act), and the responsibility of the pilot organization is limited to [number of pilots × £ 1,000] (Article 22 (3) of the UK Pilotage Act).

(4) Canada: Under Article 40 (1) of the Canadian Pilotage Act, the responsibility of the individual pilot is limited to 1,000 Canadian Dollars, and according to Article 40 (2) of the same Act, the liability of the pilot company is also limited to 1,000 Canadian Dollars.

(5) Singapore: The responsibility of pilots in Singapore is governed by the Maritime and Port Authority of Singapore Act (Chapter 170A). Therefore, the responsibility of the pilot in Singapore is the pilotage fee + Singapore \$ 1,000. The Port Authority hires

a pilot (Article 62), but the Port Authority is not responsible for accidents caused by the pilot's negligence (Article 74 (1) and (2)).

(6) Germany: Under German commercial law, the responsibility of the pilot is limited to an amount equivalent to 2,000 tonnes of vessel for non-passenger ships. In the case of passenger ships, the liability shall be limited to an amount equivalent to 12 passengers. This applies to the amount of liability corresponding to the tonnage of the accident vessel, so that the pilot's liability limit is applied.

(7) France: Under the provisions of maritime law, pilots shall not be liable to third parties for damages incurred during pilot service (Article 18 (1)). However, the pilot shall bear responsibility to the owner of the ship to a certain amount. The pilot shall deposit a sum equal to the amount determined by the French Ministry of Maritime Affairs. The responsibility of the pilot is exempt from breach of this abandonment unless the pilot's fault is a criminal offense prescribed in Article 79 of the Marine Disciplinary Criminal Code. In the case of a large port, a deposit of 10,000 Euro shall be provided by the pilot and, in the case of a small port, 3,000 euros. Therefore, according to French law, a pilot is not responsible for damages from a third party, but the shipowner is liable for the above amount of liability.

(8) Vietnam: Article 175 of the Vietnam Maritime Law states that the pilot does not bear any civil liability, but does bear administrative and criminal liability .

#### **4.2.3. Precedent of Pilot Civil Liability (Case Study)**

The British Cavendish vessel accident has affected the civil liability judgment of another accident caused by a Korean pilot. The defendant, London Port Authority, was providing pilot services near the River Thames under the Pilotage Act. The Cavendish vessel, a liquefied gas carrier, requested pilot service from the Port

Authority on February 13, 1990, and a pilot employed by the Port Authority boarded the ship. Unfortunately, the Cavendish vessel collided with a buoy through the pilot's negligence and was damaged. The owner of the ship, Cavendish, and the insurer of the shipowner put in a claim for damages with the London Port Authority.

(1) The plaintiffs' claims are as follows.

(i) The London Port Authority takes charge of the pilot's negligence. (ii) The London Port Authority has a contract to provide pilot services as a significant technology and with caution in accordance with the law, and therefore will bear the obligation to perform the contract to the plaintiff. (iii) This claim was not a claim that was excluded under Article 16 of the UK Pilotage Act.

(2) On the contrary, the defendant's opinion is as follows.

(i) The London Port Authority has an obligation to provide competent pilots. (ii) This claim was a claim that was excluded under Article 16 of the UK Pilotage Act.

The plaintiff's losses exceeded £ 1,200,000, but even if the London Port Authority is liable, the liability was limited to [number of pilots (127) × £ 1,000] ⇒ £ 127,000 under Article 22 of the Pilotage Act. In other words, even if the Port Authority is liable, only the £ 127,000 was paid to the shipowner in accordance with Article 22 of the Pilotage Act.

(3) The judgment of the UK court is as follows.

(i) Under the UK Pilotage Act, the duty of a pilot organization is to provide pilot services such as to board a competent pilot, but not to pilot the ship. Therefore, as a requirement of vicarious liability, there can be no illegal acts of the pilot organization, so the pilot organization does not bear the vicarious liability of the pilot's negligence. (ii) In the compulsory pilotage areas, there is no contractual relationship between the shipowner and the pilot. (iii) In the case of compulsory pilotage areas, the responsibility of the owner of the ship includes not only conflicts but also other

accidents, which apply to the relationship between the shipowner and the third party as well as the relationship between the shipowner and the pilot or pilot organization. Even in the case of compulsory pilotage areas, the pilot will be the employee of the owner of the ship, so the owner of the ship can not claim damages from the pilot or pilot organization against his or her damage (Lloyd's, 1993).

### **4.3. Civil Liability and Problems of Korea Pilot**

#### **4.3.1. Precedent of Pilot Civil Liability in Korea (Case study)**

(1) Factual relationship (Busan District Court Decision No. 1479, April 2, 2009)

In May 2006, a pilot embarked on a Russian ship leaving Ulsan Port. At that time, the pilots got the permission of the captain, and then the pilot disembark from the ship before the pilot boarding station because the waves were very high. During the operation of the ship, the captain caused a collision between the ship and a crude oil hose. The damaged SK company made a claim against the Russian ship owner for damages due to illegal acts. The Korean court ruled that there was negligence on the part of the pilot at the first trial. The pilot appealed to the court, but afterwards the litigation was ended by arbitration.

(2) Main Court Decisions

(i) The pilot disembarked from the ship before the pilot boarding station and violated the duty of care. The weather condition at that time seemed not to be deteriorating. Therefore, considering the negligence of the pilot, the foreign captain, and the fact that it was a compulsory pilotage area, it is gross negligence. (ii) The court cited the Cavendish Vessel accident case mentioned above. In the case of compulsory pilotage areas, the contract between the captain and the pilot is not applicable since no contractual relationship exists. (iii) As a joint tort between the shipowner and the pilot, damage has been caused to the SK company. The shipowner who compensates for

the damage has a right to an indemnity claim against the pilot for as much as his fault ratio. (iv) The pilot's negligence is recognized as 40%. Therefore, the pilot should compensate the shipowner (Russian ship owner) for 170 million won (US \$ 150,509), equivalent to 40% of the 440 million won (US \$ 389,552) that the owner of the ship paid to the SK company.

### (3) Significance of judgment

The above precedent is the first judgment that the court granted for the civil liability of a Korean pilot. This can be said to be an opportunity to correct the misperception that a pilot does not bear civil liability under the Korean legal system. As a result, in the event of a maritime accident, a pilot will be liable for damages in amounts that are difficult to personally afford (KIM, 2014).

## **4.3.2. Problems of the Civil Liability System of Korean Pilots**

Under Korean legislation, the civil liability system for pilots is still unstable. In particular, according to the judgment of the ship accident in Ulsan in 2009, the pilot individual should bear the liability for damages. Traditionally, however, Korean pilots believe that civil liability is not borne in the event of a ship accident, like in most countries. Therefore, various problems surrounding civil liability are still being raised (KMPA, 2010).

### (1) Unclear legal responsibility of pilot and captain

When a pilot embarks on a ship, most captains and crews rely on the pilot's command to operate the ship. Most laws specify the pilot as an advisor but, practically, the crew of the ship tends to be absolutely dependent on the pilot's orders. Furthermore, traditionally, Korean pilots have believed that they do not take civil liability for ship accidents. As a result, some pilots may have been working idly (Park, 2011). In the case of some captains, when a pilot embarks on a ship, the captain may take a break in his room or change clothes. In such cases, the captain often fails to properly communicate the characteristics of the ship to the pilot, or the pilot is not sensitive to legal responsibilities and does not actively communicate with the captain

(IMPA, 2014). As a result, the potential problem in communication and role between the pilot and the captain has been investigated, as described in Chapter 2.

(2) Inhibition of occupational safety

In terms of liability and compensation, the pilot must be able to make his own liability (Chen, 2012). According to the precedent of the above pilot accident, the pilot is more likely to bear civil liability for maritime accidents. Since many simple maritime accidents result in enormous damage, pilots will always be at risk of personal bankruptcy.

(3) Possibility of third party claims

Since there is no contractual relationship between the third party and the pilot, a third party can claim compensation from the pilot if an accident occurs. For example, in case of an accident caused by a collision between a port facility and a ship, a third party who operates the port facility, due to the bankruptcy of a shipping company, may charge a large amount of damage to the pilot. Therefore, the pilot has no laws or systems to protect against bankruptcy (KIM, 2014).

(4) Exposure to infinite liability and inefficiency of port operation

㊦ Pilots play an important role in enhancing maritime safety and port operation efficiency. Currently, pilots in Korea are working with the potential threat of infinite liability and subsequent bankruptcy. The opinions of the pilots shall be taken into account in deciding on the operation of each port, such as the strength of the wind and the height of the waves, the flow of the tide, and the port of entry and departure of the ship at night. Thus, the conservative working attitude of the pilot will reduce port efficiency (KMI, 2014). There is also a possibility that the efficiency of the port and the international competitiveness of the port may be lost, accordingly. Because a ship accident can be a major maritime accident that can cause enormous damage, it is impossible to force a pilot to actually manoeuvre a ship if the pilot refuses to board the ship for safety reasons. Therefore, if the pilot works conservatively, the efficiency of the port operation will be inferior.

Ⓞ This inefficiency can also be seen in the construction of port facilities. According to the Korean Maritime Safety Act, “When constructing or changing port facilities, it is absolutely necessary to receive a safety diagnosis. At that time, the pilot will be advised naturally by the local port expert”. As the pilot takes on unlimited liability in civil liability, the consequences of such a diagnostic assessment are becoming increasingly conservative. Safety is more important than efficiency, which means that Korea is paying more for the installation of a pier or a port in Korea (Kim, 2014).

(5) Rising pilotage fee

The maritime industry developed a system of risk diversification from early on due to its inherent risks and, in particular, the highly developed function of insurance compared to other industries. Korean pilots will have to pay a high insurance fees to minimize the risk of bankruptcy. Pilotage fees will be raised to fund these resources (KMPA, 2010).

(6) Equity issues with ship owners

Both shipowners and carriers enjoy the benefit of limited liability in relation to ship operation (IMO, 2018 a). It is not equitable for Korean pilots to bear infinite responsibility for civil liability for accidents. The pilot's work is part of the ship's operation, and a small portion of the shipowner's or carrier's income is paid for the pilotage fee. It is not equitable for a pilot, who has a smaller business than a shipowner or carrier, to pay more civil liability (Park, 2011).

(7) Legal equity issues

Korean pilots are subject to criminal and administrative penalties for marine accidents. In addition, if a civil liability is incurred, a maritime accident could cause the pilot and their family to lose everything (IMPA, 2014). As mentioned above, given the fact that pilots have civil liability restrictions in most countries, the penalties for Korea pilots are too severe.

#### **4.4. Review comments on Chapter 4**

In order to solve these problems reasonably, it is necessary to clarify the civil liability for pilots. In Chapter 5, legal supplementation methods will be outlined.

## **5. Proposal for Pilot's Civil Liability Restriction System**

As already seen, European shipping countries, including the UK and France, as well as Asian countries such as Singapore and Vietnam, have legislated civil liability restrictions on accidents involving pilots. This is because the civil liability restraint system is a common practice in the international maritime industry and the necessity of this system is generally recognized. In addition, it is necessary to prevent the confusion caused by uncertainties in the responsibility of the pilot and the captain in maritime accidents. In order to do this, it is necessary to clarify the responsibility of the pilot.

### **5.1. Restriction of Liability**

#### **5.1.1. Limitation of Damages Claim**

According to the Compensation for Oil Pollution Damage Guarantee Act, the victim can claim damages only from the owner of the registered ship, and can not claim from the employee, charterer, pilot, or crew (Article 5(5)). This includes pilots, so even if an oil pollution accident occurs while the pilot is onboard, the pilot will not be charged for damages to a third party. Moreover, the owner of the ship can make a claim against the pilot, but the law allows the claim to be made only if there is intent or negligence by the pilot (Article 7(1)). In the event of an accident, the victim will not be allowed to make a claim against the pilot and the owner of the ship will be able to make a claim only if the pilot has gross negligence. However, it can be argued that this legal improvement is unilaterally favorable to the pilot.

#### **5.1.2. Set the Amount of Liability Limit**

The shipowner may limit the liability at a certain amount (the shipowner liability limitation system) and the pilot may also limit the liability according to the tonnage of the ship in accordance with the shipowner liability limitation system. For example, in the case of an accident that damages the pier during piloting, the shipowner may be able to limit civil liability to the owner of the pier (Commercial Act Article 769). Theoretically, pilots can also have civil liability restrictions the same as shipowners. However, since the amount of these limitations is usually billions of Korean won, it is

impractical because they cannot be utilized as a protection system for a pilot who is a private business. A more realistic approach is to use a liability limit, such as in the UK or Singapore, to add a certain amount to the fee for the damaged voyage. The UK has a civil liability of approximately £1,000, and Singapore of approximately Singapore \$1,000, in conjunction with the pilotage fee. As a result of examining the various circumstances in this study, the effectiveness of legislative cases and legislations in various countries, the reasonable amount of civil liability limitation is the sum of 1,100,000 Korean won (1,000 US dollar, one-time average) added to the ship's pilotage fee.

**The 2017 pilotage fee for Korea is as follows.**

Pilotage district	Number of ships	Amount of pilotage fee	1 time average
<b>Busan</b>	35,667	32,941,180,850	923,575
<b>Yeosu</b>	23,095	25,195,160,060	1,090,935
<b>Incheon</b>	16,740	23,887,831,620	1,426,991
<b>Ulsan</b>	22,742	18,146,461,550	797,927
<b>Pyeongtaek</b>	11,709	15,632,433,594	1,335,078
<b>Masan,</b>	4,676	9,491,236,780	2,029,776
<b>Daesan</b>	9,313	11,411,834,340	1,225,366
<b>Pohang</b>	5,321	4,525,205,340	850,442
<b>Mokpo</b>	1,922	2,912,687,766	1,515,446
<b>Donghae</b>	3,124	3,230,344,150	1,034,041
<b>Jeju</b>	377	446,931,630	1,185,495
<b>Total</b>	<b>134,686</b>	<b>147,821,307,680</b>	<b>1,097,525</b>

Table 4. Pilotage Fee and one-time average, (Source: KMPA). Currency Unit (Korean won)

This liability limitation shall be such that the cause of the claim is applied in all cases, default or illegality. However, this limitation of liability shall not apply in the case of intent or negligence by the pilot.

### 5.1.3. Specific Legal Amendments

This study suggests that the Korean Pilotage Act should establish the following provisions for the restriction of claims for damages and the establishment of limitations on liability.

#### (1) Suggestion

	<b>Establish a new provision</b>
(New provision)	<p>(Pilot's liability limitation)</p> <p>The pilot's civil liability shall be limited to the sum of ( 1.1 million won + pilot fee ) , if the pilot causes damage in the case of an accident related to the pilot service (Include compulsory pilotage area).</p> <p>However, this is not the case if damage is caused by the intent or negligence of the pilot.</p>

#### (2) Reason for Suggestion

① It is to clarify the civil liability of the pilot and to improve the legal imperfections.

Based on this, clarify the responsibility relationship between the pilot and the captain, and make necessary institutional improvements.

② As a result of examining the legal cases and the effectiveness of the law in various countries, the amount of liability limit was judged to be the sum of 1.1 million won (1,000 USD) added to the pilot fee.

③ The discretionary pilotage area and the compulsory pilotage area are both applied.

④ This shall also apply to damages caused by illegal acts. For example, if a third party who owns a pier in a pier accident claims damage compensation from the pilot, it should be made available.

⑤ In the case of a pilot's intent or negligence, the pilot should bear civil liability. This is because there is no need to protect the pilot.

## **5.2. Expected Effect of Pilot's Civil Liability Restriction**

### **5.2.1. Ability to Establish Clear Responsibilities Between Pilot and Captain**

By clarifying the responsibility of the pilot and the captain, mutual checks and balances can be maintained. Because pilots are human, they can cause accidents. In order to prevent such accidents, bridge teams should complement and check each other. By clarifying this accountability, a more specific way to train pilots in BRM teams can be adopted. It is expected that the system of accident prevention by pilots will be made more detailed.

### **5.2.2. Mental Stability can be Secured**

If the pilot disputes with the shipowner or the third victim due to a maritime accident that occurred during the pilot service, the pilot becomes mentally uneasy. This makes it difficult to provide a secure pilot service. Recognizing liability limitations will enable stable pilot services. Furthermore, it is possible to prevent a passive pilot service from being afraid of liability for damages.

### **5.2.3. Can Secure International Competitiveness**

It will also be possible to secure international competitiveness through civil liability limitation. The limitation of the pilot's liability can be maintained at a certain level of the pilot fee as described above, thus enhancing the competitiveness of each port in Korea.

#### **5.2.4. Added Merits while Maintaining Current Status**

Even if civil liability restrictions are recognized, there is no difference from the current situation. In other words, there is no more damage to the shipowner or third parties than the present condition because the pilot's liability is recognized. The damage resulting from the accident caused by the pilot will be paid by the insurer based on the premium paid by the shipowner. The insurer paid by the insurance company is already included in the premium paid by the shipowner, so the insurer will not have to charge the pilot.

## **6. Summary and Conclusions**

Pilots have excellent local information and a high level of ship maneuverability and navigation skills. However, the pilot is not the guarantor of all safety on ship voyages. Maritime accidents can occur due to natural disasters, unexpected mechanical or equipment failures, or other human errors. The pilot knows that every time they board a ship, accidental mistakes and misjudgements can lead to marine accidents, which can result in catastrophic events, including property damage and human casualties. Such an accident can completely ruin the career of the pilot individual, and it can be a crisis of bankruptcy for both the pilot and their family.

Traditionally, due to these risks, the shipowner or the third party did not claim damages from the pilot for an accident caused by the pilot. At least in the past, shipowners and P & I not only did not handle the disadvantage of the pilot, but also did not ask the pilot for final proof of damage. They would rather have defended the accident for the pilot. This was because maritime accidents far exceeded the limits that individual pilots could afford. (IMPA, 2014).

For these reasons, pilots in Korea believed that if an accident occurred, they would be charged with the criminal responsibility and administrative responsibility prescribed in the pilotage act, but not the civil liability, which is not stipulated in the pilotage act. However, due to the maritime accidents in Ulsan Port in 2007, Korean pilots also have a precedent to bear civil liability. There is a difference between the understanding of the pilot and the reality. This is because the pilotage act still does not have clear legal provisions on civil liability. For this reason, most pilots lack an accurate understanding of the relationship between the pilot and the captain. Some pilots even tend to operate the vessel unilaterally and ignore the captain (KMPA, 2010). This is one reason why it is necessary to establish clear civil liability for accidents occurring during the pilot's boarding. There are also various reasons already mentioned in Chapter 4.

Pilots should also bear civil liability if there is obvious intent and negligence in the accident. However, civil liability shall be limited to a certain amount to the extent that the pilot individual can afford. The introduction of this pilot civil liability restriction system will allow the pilot to provide safe pilot services in a stable psychological state and will free them from legal disputes on pilots' accidents.

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## Appendix

**Pilot Service Evaluation Form** : Questionnaire conducted by the Korean Shipowners' Association described in Chapter 2



Date of issue : \_\_\_\_\_

Department : \_\_\_\_\_

Ship name : \_\_\_\_\_

## Pilot Service Evaluation Form

This evaluation will be used as a base for improving the pilot service in Korea.

1. General Information (Please fill in the relevant information or mark v in the check box)

- Pilot name (or initials) :	- Co- pilot name (or initial) :
- <input type="checkbox"/> Berthing / <input type="checkbox"/> Unberthing	- Pilotage area : _____
- Pilot boarding and leave a ship time : Month, Day, Hour, Minute ~ Month, Day, Hour, Minute (Korean time)	

2. Pilot service evaluation (please mark v in the check box)

<b>1) Boarding and leave a ship area compliance</b>	
Ⓛ Did the pilots compliance to the ship's Boarding and leave areas?	Yes / No
Ⓛ If not, why? (Check all that apply)	Weather / Requirements of Pilot / Requirements of Shipping Company / Pre-agreement / Pre-agreement X
<b>2) Pilotage plan</b>	
Ⓛ Did the pilot provide and explain the passage plan?	Offer (had / did not) / explain (had / did not)
Ⓛ What is the evaluation of the description of the passage plan by the pilot?	Very Satisfied / Satisfied / Normal / Dissatisfied / Very Dissatisfied
Ⓛ Did the pilot follow the passage plan?	Yes / No / I do not know well
Ⓛ Ⓛ If the answer is No, what is the violation? (Multiple choices available)	Ship's route / Ship's speed / Transit point / tug boat placement / Others ( )
<b>3) Pilot</b>	

① What were the words and actions of the pilot?	Very appropriate / proper / normal / inappropriate / very inappropriate
② How was the pilot communicating with the captain, crew, and VTS?	Very appropriate / proper / normal / inappropriate / very inappropriate
③ What was the operation of the pilot's vessel equipment?	Very appropriate / proper / normal / inappropriate / very inappropriate
<b>4) Relationship with Captain</b>	
① How was the cooperation between the pilot and the captain?	Very appropriate / proper / normal / inappropriate / very inappropriate
② Was the role of the pilot and captain appropriate?	Very appropriate / proper / normal / inappropriate / very inappropriate
<b>5) Others</b>	
① What was your overall assessment of the pilot service?	Very Satisfied / Satisfied / Normal / Dissatisfied / Very Dissatisfied
② What was your assessment of the pilot's outfit?	Very appropriate / proper / normal / inappropriate / very inappropriate
③ Did the pilot use his cell phone privately during work?	Yes / No / I do not know well
④ Would you like to use your current pilot again?	Yes / No / I do not know well

3. Are there any suggestions for improving the quality of other pilot services? (Brief description)

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