

Section 3. Engineering sciences in general

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SECURITY OF FIRE PREVENTION AND FIGHTING FOR SEAPORTS IN VIETNAM MEETS REQUIREMENTS FOR INTERNATIONAL INTEGRATING

Abstract. Ensuring the safety of fire prevention and fighting for seaports has a meaning and an important role to meet the requirements of socio-economic development of the country as well as international integration. The article focuses on the results of research on the characteristics of seaports related to the management; practice of ensuring safety in fire prevention and fighting here as well as making recommendations with conclusions to contribute to ensuring safety and creating motivation for sustainable economic development.

Keywords: Seaport; fire prevention and fighting; international integration.

1. Make a problem

Vietnam has a sea area of over 1.0 million square kilometers, three times the land area; The coastline is over 3,260 km long with many peninsulas, protected bays and waves, great natural depth, and a project on the busiest maritime route in the world... From the advantages of the sea, the birth of a seaport is inevitable and closely associated with all production activities and people's lives, in which, seaports play the role of a constituent part of seaports, contributing to the development of logistics, transportation and infrastructure (wharfs, warehouses, yards, factories, headquarters, traffic...) at seaports [3]. Also from the advantage of the sea, the economy of seaport exploitation and shipping has formed and is increasingly playing a particularly important role in the development of the marine economy and the international integration process of the country.

According to statistics, Vietnam currently has 296 seaports stretching from North to South, in which, concentrated in some localities such as [1]: Quang Ninh province (14 seaports); Hai Phong city (52 seaports); Da Nang city (08 seaports); Quang Ngai province (07 seaports); Binh Dinh province (04 seaports); Khanh Hoa province (16 seaports); Ho Chi Minh City (43 seaports); Ba Ria – Vung Tau province (47 seaports); Dong Nai province (18 seaports); Can Tho city (21 seaports) ... To develop the above advantages, the Government has issued many documents to promote the development planning of seaports and seaports, typically: Decision No.1579 /QD-TTg dated September 22, 2021 of the Prime Minister approving the master plan on development of Vietnam's seaport system in the period of 2021–2030, with a vision to 2050 [10]. Accordingly, it is necessary to develop the seaport system and modern on a par with the region and the world, meeting

green port criteria; fully and effectively meeting the country's socio-economic development needs, is the main pillar that plays the role of driving force, leading and successfully developing the maritime economy.

2. Research results discussed

2.1. Studying the characteristics of seaports from the perspective of state management

– Regarding the object of state management of fire prevention and fighting for seaports: Based on legal documents on fire prevention and fighting, related legal documents to determine the object of state management of fire prevention and fighting for seaports, avoiding the tendency to identify rampantly or omit subjects subject to fire prevention and fighting management at seaports and operating facilities in the seaport area. On that basis, the object of state management of fire prevention and fighting for seaports is fire prevention and fighting activities of enterprises, organizations and individuals investing in the construction and trading of technical infrastructure of seaports, trading, transportation facilities... in the seaport area. Pursuant to the 2001 Law on Fire Prevention and Fighting (amended and supplemented in 2013), Decree No.136/2020/ND-CP... to specify the objects of state management of fire prevention and fighting for seaports and facilities in seaport area.

In the state management of fire prevention and fighting for seaports and business and exploitation establishments in seaports, it is necessary to always focus on improving the fire prevention and fighting responsibility of the Maritime Port Authority for business and exploitation activities at seaports; The port authority's responsibility for fire prevention and fighting is considered a special object in the object of state management of fire prevention and fighting at seaports and facilities in the seaport area. Because, this is the entity responsible for operating and managing the entire operation of the seaport, and at the same time, the subject is responsible before the law for all such activities. In particular, the organization and maintenance of fire prevention and fighting ac-

tivities at seaports under their management is one of the mandatory requirements that the law on fire prevention and fighting has specified in legal documents, standards and regulations, technical standards on fire protection.

– The entity directly assigned the task of performing state management of fire prevention and fighting for seaports and facilities operating in seaports is the Fire and Rescue Police force, which is specifically led by the Fire and Rescue Police Department – the provincial-level Public Security Administration. The Provincial-level Police Department of Fire and Rescue shall perform the tasks and powers according to Article 2 of the Decision No.2413/QĐ-BCA dated April 9, 2019 of the Ministry of Public Security defining the functions, tasks, powers and organization. organize the apparatus of the Police Department of Fire Prevention and Fighting and the Central High Commission of the Public Security of the provinces and centrally-run cities to carry out the contents of state management of fire prevention and fighting specified in Article 57 of the Law on Fire Prevention and Control; also perform the functions and tasks of state management of navigation at seaports as the Maritime Port Authority (according to Circular No.19/2021/TT-BGTVT dated September 14, 2021 of the Ministry of Transport, providing regulations on the organization and operation of the Maritime Administration).

– State management tools on fire prevention and fighting for seaports are the provisions of law related to the assurance of fire prevention and fighting safety in seaports. The legal system on fire prevention and fighting and other laws related to seaports, standards and technical regulations on fire prevention and fighting in general and for seaports and facilities in seaports in particular; planning and planning, aimed at setting goals and establishing the means to achieve them; organize the state apparatus and the state mobilizes social organizations in general and in the state management of fire prevention and fighting for seaports and facilities in the seaport area in particular,

fully and uniformly, Scientific, feasible and appropriate conditions will create favorable conditions for competent state agencies in the state management of fire prevention and fighting for seaports and facilities in seaports. At the same time, create clear legal regulations for investors and contractors when investing and exploiting at seaports.

– Methods of state management of fire prevention and fighting are methods and measures affecting the activities of subjects under management in the field of fire prevention and fighting. The State can use its power to issue mandatory orders and decisions, or to encourage and encourage the participation of other actors in fire prevention and fighting activities. For seaports and facilities in seaports, too, the state stipulates requirements and safety conditions for fire prevention and fighting, responsibilities of the head of the facility, etc. through legal documents. laws, standards, technical regulations on fire prevention and fighting and other legal documents related to seaports. These are mandatory regulations that when participating in legal relations on fire prevention and fighting at seaports and facilities in seaport areas, they must strictly comply [4; 5].

– The objective of the state management of fire prevention and fighting for seaports is to minimize the occurrence of fires and damage caused by fires at seaports, contributing to the protection of human lives and health. people, protect property of the State, organizations and individuals, protect the environment, ensure security and social order and safety; bringing fire prevention and fighting activities step by step to meet the requirements of socio-economic development, effectively serving the cause of industrialization and modernization of the country and international integration.

2.2. Research on ensuring fire prevention and fighting safety at seaports

– On the side of seaports [6; 8]: Being aware of the importance of fire prevention and fighting work at seaports, the governing agencies, management and operation units of seaports have paid attention to the

work of ensuring safety. in exploitation and operation. The management units have fully fulfilled the responsibilities of the agencies and heads: Organizing propaganda and dissemination of knowledge on fire prevention and fighting; building a movement of all people to participate in fire prevention and fighting; establishment and maintenance of fire prevention and fighting teams according to the provisions of law; To promulgate according to its competence regulations and measures on fire prevention and fighting; Organize the implementation, inspection and supervision of the observance of regulations on fire prevention and fighting; Ensuring funds for fire prevention and fighting activities, using fire prevention and fighting funds for the right purposes; equip and maintain the operation of tools and means of fire prevention and fighting; prepare conditions for fighting; formulating and organizing practice of fighting plans; ensure conditions for professional training on fire prevention and fighting; organizing fighting and overcoming consequences caused by fire; Perform other tasks on fire prevention and fighting as prescribed by law. In which, it is clear that 100% of seaports have regulations and rules on fire prevention and fighting; have a fire fighting plan; Fully equipped with fire protection equipment. Along with that, at seaports, there was interest in establishing specialized fire prevention and fighting teams or grassroots fighting teams (*Figure 1*). Typically, in Hai Phong, this is the locality with the most seaports in the country, 100% of seaports have specialized fire protection teams. Along with that, through surveys at seaports, the arrangement of goods on the gathering yards is always concerned, arranged, and ensured a safe distance from fire protection. In particular, goods at risk of fire and explosion have been arranged and arranged in a separate area. Fire protection work here always meets the requirements of ensuring safety during the import and export of goods.

– On the side of the Fire and Rescue Police force [2]: This is the main force in performing the functions and tasks of state management of fire prevention and

fighting at seaports. Through the survey, in localities with many seaports, along with the attention of all levels, branches, the Fire and Rescue Police have fully fulfilled their responsibilities in management. 100% of seaports have been carried out basic survey, management votes have been drawn up; all seaports already have fighting plans prepared by the Fire and Rescue Police force; Every year, there is a practice of fighting plans, including a large fighting drill with the participation of clusters of seaports, with situations close to reality. Besides, the propaganda and dissemination of laws and knowledge on fire prevention and fighting at

seaports are always interested and invested (*Figure 2*). Clearly identifying this is an important task, thereby creating a change in awareness for the Management Board, the heads as well as officials and employees here. On the other hand, in order to detect loopholes and shortcomings in fire prevention and fighting work here, every year, there is a serious inspection and inspection of fire safety (*Figure 3*). The Fire and Rescue Police force also regularly pays attention to training the grassroots fire prevention and fighting teams as well as specialized fighting teams in terms of knowledge, expertise as well as initial fighting work.

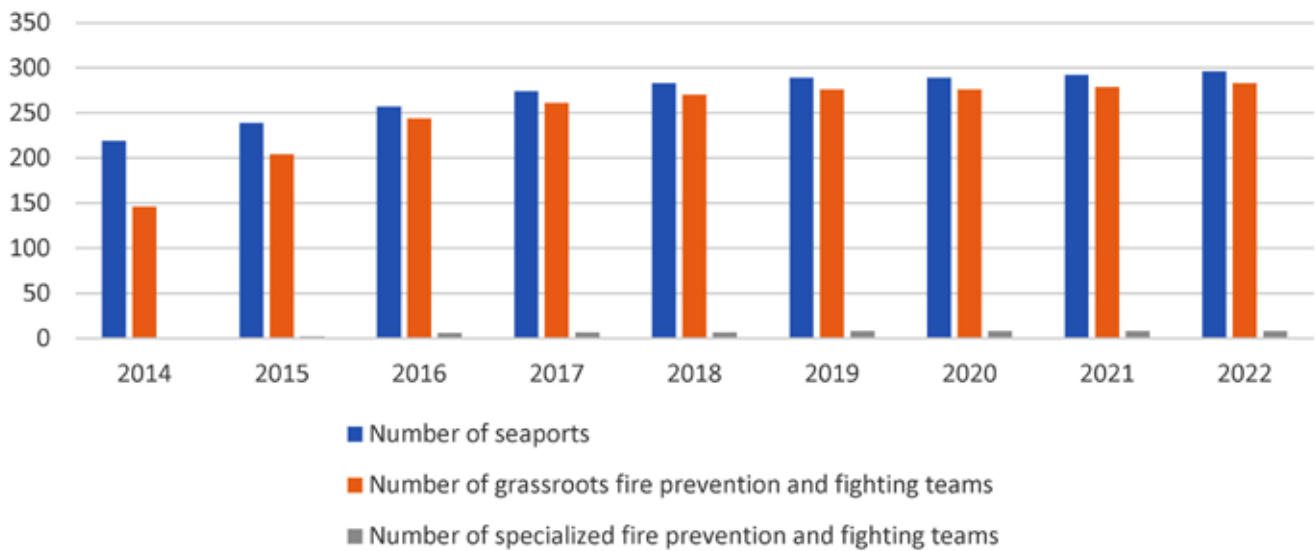


Figure 1. Number of grassroots and specialized fire prevention and fighting teams at seaports

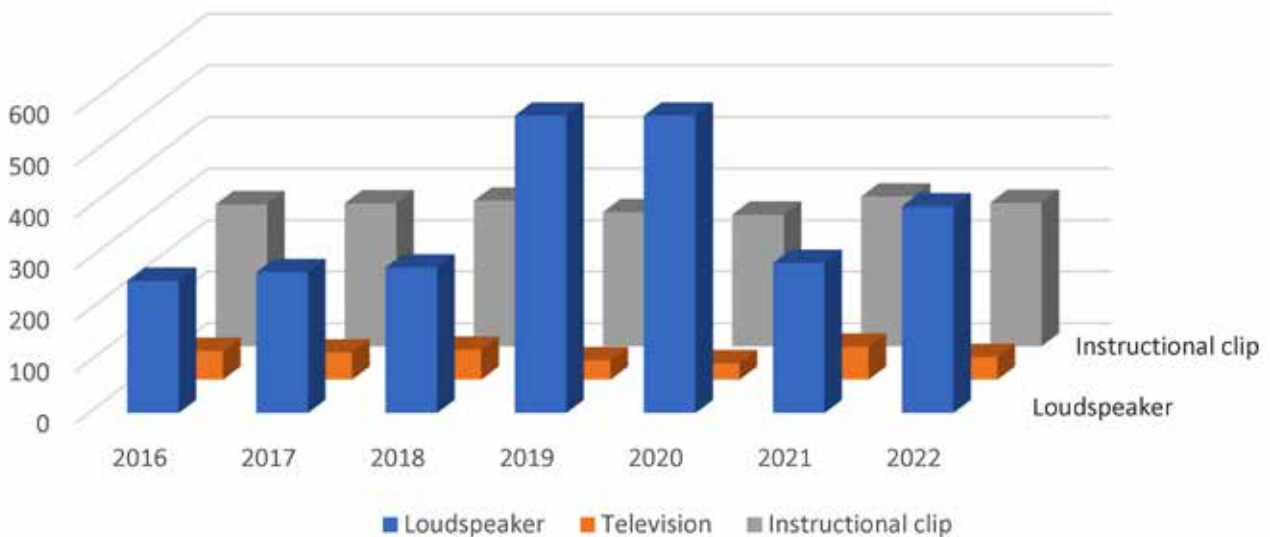


Figure 2. Number of propaganda on mass media

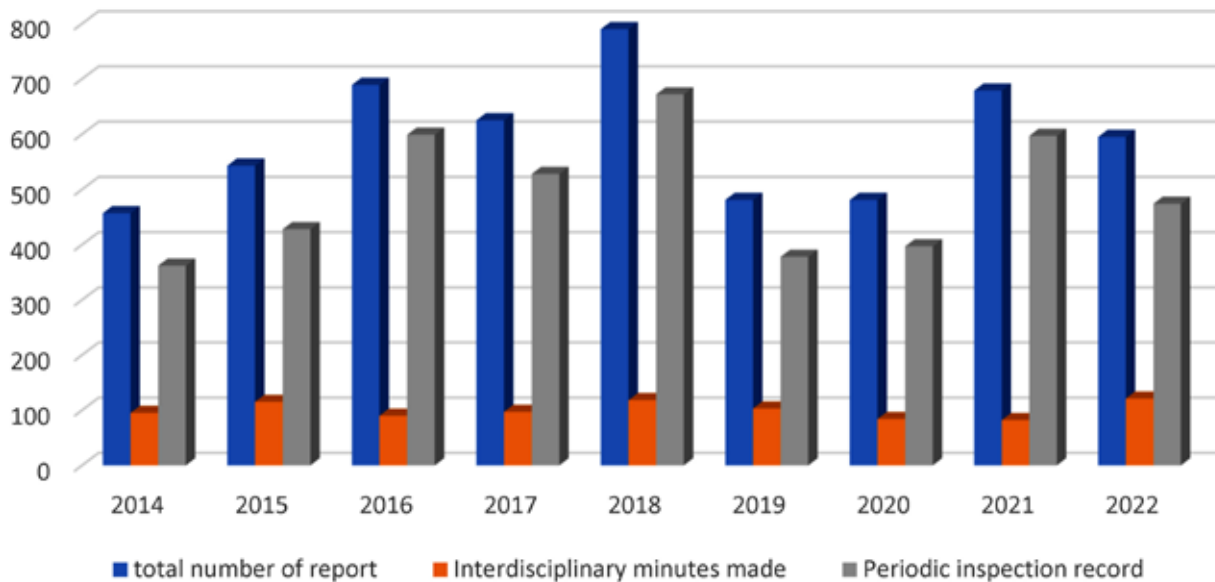


Figure 3. Statistics of fire safety inspection for sea harbour

3. Some conclusions and recommendations

3.1. Advise and propose to competent state agencies to promulgate documents related to the state management of fire prevention and fighting

At the central level: The Ministry of Public Security, which is directly the Fire Prevention and Fighting Police Department, is the standing agency assisting the Minister of Public Security in performing the functions and tasks of state management of fire prevention and fighting throughout the country... At the same time, it is the agency that directly guides and directs in terms of expertise and professionalism in fire prevention and fighting for the fire prevention and fighting police forces in the police of local units.

In the locality: The Fire Prevention and Fighting Police Department and the Provincial Police Department need to seriously study, absorb and effectively apply the provisions of the law, standards, technical regulations on fire prevention and fighting, and professional guidance. of the Ministry of Public Security, of the Fire Protection and Rescue Police Department.

3.2. Renovate contents and forms of propaganda, dissemination and education of the law on fire prevention and fighting for seaports

* About the content: Completing the content of propaganda, disseminating the law and knowledge

on fire prevention and fighting suitable for seaports. The purpose of the propaganda is to make the seaport management and operation board, the owners of facilities and means of operation in the seaport understand and grasp the provisions of the law on fire prevention and fighting [7]. Contents of propaganda materials at seaports, which are built, must ensure the general structure, including the following parts:

- Introduction: An overview of the status and development of seaports;
- Part I: Actual situation of fire prevention and fighting work at seaports, seaport fire situation and related issues;
- Part II: Documents on Fire Protection Law; regulations, regulations and standards related to seaports;
- Part III: Basic knowledge of fire prevention and fighting for seaports;
- Part IV: Personal techniques, how to use fire-extinguishing means on the spot and handle situations when fire occurs;
- Part V: Escape skills when a seaport fire occurs.

* In terms of form: In order to do well in propagating and disseminating the law and knowledge on fire prevention and fighting for seaports, it is necessary to research and select many forms of communication

to use at the same time and the content must be Distilled and built in a rich way will attract many propagandists and participants. At the same time, based on the actual conditions, the propaganda method is new, modern and attractive to the people being propagated, and chooses the appropriate form to build the point propaganda model.

Model description: The propaganda model operates based on the internal broadcasting system at seaports, in order to transmit information on legal knowledge, fire prevention and fighting operations (can be integrated with advertising programs). advertising, breaking news to avoid boredom, ensure continuous broadcast time, collect funding through advertising, etc.), broadcast time at all hours of the day, program content is change by month, quarter.

Selection of propaganda form: General propaganda.

Propaganda method: Propaganda through the internal broadcasting system at seaports.

Program content development: Based on propaganda content compiled to serve the propaganda and dissemination of laws, knowledge of fire prevention and fighting at seaports, staged into skits, building reportages. The short video introduces lectures on fire safety for seaports, how to use fighting equipment on site, and disseminates legal knowledge and skills to handle when a fire occurs at a seaport.

Funding for implementation: Mobilizing facilities operating in seaports to contribute and use the funds for propaganda on fire prevention and fighting of the Seaport Management and Operation Board, the funding source through advertising contracts broadcast on the system. internal broadcast; or deduct from the annual service fee of the seaport... on the basis of promoting the socialization of propaganda, law dissemination and knowledge on fire prevention and fighting at seaports.

Developing a plan: Coordinating in building and deploying a propaganda model on fire prevention and fighting through the internal broadcasting system at seaports.

Exploiting organization: After the complete model is handed over to the Seaport Management and Operation Board for exploitation and use, based on the tasks of the relevant units, it will provide propaganda content, check the implementation of the proposed plan.

3.3. Standardization of contents, requirements, order and procedures for design appraisal, approval and acceptance of fire prevention and fighting for seaports

Comply with regulations, order and procedures as prescribed by legal documents. Accordingly, the Fire Police force strictly implements decentralization in the work of fire prevention and fighting appraisal for seaports according to the provisions of Clause 12, Article 13 of Decree No.136/2020/ND-CP dated November 24/2020 of the Government and Circular No.149/2020/TT-BCA dated December 31, 2020 of the Ministry of Public Security.

Promote reform of administrative procedures in the work of design appraisal, acceptance and acceptance of fire prevention and fighting in the direction of simplification and application of science and technology to the organization performing this work. Systematize the list of administrative procedures and put them on the online public service platform; receive and process applications for approval through a system of machinery and technology to help transparency and shorten processing time.

3.4. Well organize the inspection and handling of violations of fire prevention and fighting at seaports

Do well the work of grasping the situation, basic investigation in service of making a complete list and accurate classification of facilities in the seaport, without omitting or omitting facilities; and at the same time make and register a dossier of management of fire prevention and fighting work for the facility in accordance with the provisions of the Fire Protection and Rescue Police Department.

Seaports are invested and equipped with infrastructure, including a foundation of digital technol-

ogy for operation and management at seaports, so the process of safety inspection on fire prevention and fighting and staff safety. State management of fire prevention and fighting needs to research and effectively apply information technology to solve administrative procedures related to order and procedures for inspection, making and approving minutes of fire safety inspection. for seaports.

3.5. Improve the operational quality of the fire prevention and fighting forces in place of seaports

According to the survey results, with 283 grassroots fire prevention and fighting teams consisting of 1094 members and 08 specialized fire prevention and fighting teams with 222 members at 296 seaports, it can be said that the grassroots and specialized fire protection forces at seaports hold the highest position. In order to contribute to improving the quality of operation of this force, in the coming time, it is necessary to focus on the following contents:

Advising on promulgating and proposing the Seaport Management and Operation Board, the leaders of the Maritime Department to issue regulations and safety rules on fire prevention and fighting.

Regularly review, consolidate and organize the contingent and apparatus of grassroots and specialized fire prevention and fighting teams at facilities operating in seaports. The regular maintenance of the structure and members of the grassroots and specialized fire prevention and fighting teams is both a requirement of the law on fire protection and an important condition in the development and improvement of the operational efficiency of the grassroots fire prevention and fighting teams. department, specialty.

3.6. Develop fighting plans and organize practice of fighting plans to meet requirements at seaports

For the facility's fighting plan, i.e. the fighting plan of the facilities in the seaport, follow the form No. PC17 issued together with the Decree No. 136/2020/ND-CP dated November 24, 2020. government.

The grassroots and specialized fire protection teams at seaports should actively advise the heads of seaports and seaport management boards to organize learning fighting plans for operating units and individuals. working in seaports. All the people mobilized to participate in the practice of fighting plans must grasp the content of the hypothetical situations and their tasks in each specific situation.

For the fighting plan of the Fire Prevention and Fighting Police force, the police of local units built for the seaport, it is necessary to coordinate and assign specific tasks to the facilities in the seaport when participating in the construction of the seaport. practice fighting plan for the whole seaport. The fighting plan of the Fire Prevention and Fighting Police force for the seaport will be a plan with the coordination and mobilization of many forces and means to participate in the exercise, in which, the on-site fire prevention and fighting force at the wharf. seaport.

4. Conclusion of research problem

Construction, planning and development of seaports are the goals and directions that the Government, ministries, branches and local authorities pay attention and invest in to promote the local and national economy. To ensure synchronous and sustainable development, ensuring fire safety is an important factor that directly affects the normal operation of seaports in general, including seaports, meeting international integration requirements.

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