**PORT MANAGEMENT AND SECURITY**

**Abstract**

The concerned report focuses on the protection of the port mentioned in the case study of the “Three Quays, One Lock scenario” from the attack of the part of Greenearth that has left them. The report has focused on two major sections which are the immediate actions for the protection of the port from such attacks and the long-term business strategy that will enable the port from developing a business structure. Further, a detailed study has also been portrayed regarding a few effective legislative measures related to the protection of the port from such a negative set of activities.

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# Introduction

The report aims to shed light on the protection of the port that is likely to be getting attacked by an extremist group that has broken from the Greenearth. It is a non-violent environmental campaign that used to create disruptions in the economy but always avoided violent activities. The study will be focusing on the case study “Three Quays, One lock scenario”. A detailed discussion will be provided regarding the immediate set of actions that need to be taken by the port both in terms of protective measures and legislative measures. In addition, an elaborative study will be conducted on the long-term strategy regarding the protection of the port that will further facilitate the development of the business as well.

# Immediate actions

This section of the study will focus on the number of risks that exist in ports and their respective mitigation strategies. As per the information mentioned in the case study, the vessel that has been discharged with the genetically modified animal feedstuff needs to be protected from the attack of the invaders. To perform such an activity sufficient amount of strategies needs to be implemented on the respective ports. Besides the implementation of such measures, an effective amount of legislative measures needs to be considered such that if any invaders get caught due to the high security they are provided punishments as per the rules and regulations set by the various sections of the law.

## Risk and mitigation methods to be deployed to protect the port

There exist a number of effective mitigation methods that if deployed and implemented properly on the respective port, will highly help such places to be protected from invaders and the goods or the cargo will be successfully imported or exported to different countries without facing any major problem. The following are the few respective mitigation methods.

* ***Implementing the concept of perimeter fencing***- This is the process of keeping or installing physical barriers on the various ports (Hecker, 2020). The physical barriers are primarily the human beings who act as sensors or alarms and protect the port from any type of negative activities which may affect the import and export system of cargo.
* ***Having proper access to the control system***- This process refers to the method of having a strong grip over the control system relating to the gates and turnstiles which act as a barrier for the entry of any invader to the port (Cárdenas *et al.*, 2019). In the modern world of advanced technology modernized AI tools or robotics can be used in the process of controlling systems and biometric authentications can also be installed.
* ***Having proper and working CCTV cameras***- Installing CCTV cameras on each of the ports will always keep a strict eye on the proceedings of the port and if any negative is traced or seen through the cameras sufficient and effective set of actions will be taken at that current moment (Wilhelm and Gokce, 2019).
* ***Measures related to cyber security***- The process of implementing robust cyber security measures in terms of anti-virus software, intrusion detection, and firewalls can highly protect the port from getting invaded by any negative personalities.

## Improvisation of the port infrastructure

As per the set of information mentioned in the case study, it can be said that an immediate set of actions needs to be implemented regarding the process of improvising the security infrastructure of the port. As stated the control gate Yale Quay which is the main entrance of the port is guarded by a single security on an eight-hour basis. Further, such securities are not properly trained and have only basic training. It is not possible for such non-trained security to face such consequences and ***it is high time for the port management to increase the number of security and keep that individuals who have specialized training***.

Lack of radio communication is severely found in the ports and such securities are reliant only on telephone contacts. ***Strict action needs to be taken to install and implement radio communication techniques such that the efficient new set of trained securities can take necessary action when required.***

It has also been found that the quality of the fencing and the respective CCTV cameras are inexpensive in nature. A sufficient amount of money needs to be spent by the port management structure to ***purchase superior quality such goods for the protection of the port from any major mishap***. Lastly, the local police need to be instructed to ***patrol the area in a more efficient and effective manner.***

## Relevant legislation related to maritime and port security

***Section 16*** of the ***International Ship and Port facility security*** (ISPS) Code contains requirements that relate to the implementation and development of maritime and security of the ports legislation (Jović *et al*., 2019). ***Parts A and B of the ISPS code*** require the contracting government to -

***Part A***

* Establish an appropriate legal framework to ensure effective implementation of the ISPS code providing sanctions in case of non-compliance.
* Designation of a competent authority to oversee the implementation and enforcement of the ISPS code for shipping and porting facilities.
* Developing and implementing procedures for monitoring compliance with the ISPS code including the conduction of audits and inspections.

***Part B***

* Developing and implementing procedures for reporting incidents related to security including the establishment of a reporting system for the security incidence.
* Developing and implementing procedures for responding to security threats or breaches including the designation of teams and development of contingency plans (Umar, 2022).
* Establishing procedures for sharing security-related information with the government including the International Maritime Organization (IMO) and International Association of Ports and Harbors (IAPH).

Thus, Section 16 parts A and B of the ISPS code require contracting governments to establish a proper legal framework and procedure for ensuring the effective implementation and enforcement of the ISPS code. These requirements are intended to promote the safety and security of maritime transportation and development prevention attacks on ships and other pose facilities.

## Set of actions to be taken to protect GM products

As mentioned above some effective set of actions need to be taken to protect GM products that are being sent through ships. Such actions are as follows:-

* Installing proper and high-quality CCTV cameras on the ports to protect such cargo from getting theft and destroyed.
* Powerful and strict security needs to be kept in the ports in order to have a strict eye on the various actions that are taking place in that respective place (Chen *et al*., 2019).
* Effective legislative measures need to be taken to protect the cargo and punish the invaders if they get caught committing a negative set of activities.

# The long-term strategy of the port for business development

## Strategies to protect the port for a long term

Ports are considered to be a very crucial component for every country and its respective economic structure. Protecting such ports is one of the core responsibilities of the government structure of the country. As mentioned in the case study provided such places are usually vulnerable to various types of threats such as piracy, smuggling, and terrorism. The following are some of the effective strategies which if implemented can protect a port for a long term

* ***Assessing the risk-*** The primary step for protecting a port is a comprehensive risk assessment. This assessment will help to identify all the potential risks such as cyber threats and other types of threats that may hamper or destroy the cargo that is being either imported or exported to or from other countries (Aldaya *et al*., 2019)
* ***Implementing physical security***- This is the process of keeping individuals in form of security who have specialized training regarding the protection of various ports. As already mentioned such places are used vulnerable to various types of smuggling. It is very important for such individuals to be powerful and extremely much trained.
* ***Emergency response***- One of the critical parts that must be there in the plan of a port is the concept of emergency response. The plan should include procedures for responding to natural disasters, cyber-attacks, or any type of terrorist attack. Emergency response personnel should be well-trained and have the required information regarding the protection process.
* ***Collaboration***- In order to protect the port from various terrorist and cyber-attacks it is very much necessary to have and maintain a collaborative attitude with the state holders. There lie various stakeholders who play major roles in the protection and functioning of the force (Senarak, 2021). Maintaining the concept of mutual understanding and mutual collaboration will help in developing good relationships thereby will protect the port from any negative

Thus it can be said that if the above-mentioned set of strategies which included assessing the risk, implementing proper and trained physical security, having an emergency response, and maintaining a collaborative attitude is followed the ports will be totally secure. As per the information mentioned in the case study, all such things are seen to be absent due to which the cargo which is the genetically modified animal feedstuffs are in threat of getting attacked by an extremist group that has broken from the Greenearth. Thus it is one of the core duties of the managerial structure of the port to implement these strategies that will not only protect the cargo of the present time but also will help in protection for a longer future period of time.

## Impact of port security on business development.

As per the set of information mentioned in the case study port security plays a vital role in the development of various business organizations. Ports security creates a secure environment for the firms to conduct their operation successfully. A secure port provides reliable and effective supply chain management for the transportation of goods and services. The followings are the reasons or the impact of port security on successful business development

* ***Enhances the supply chain management of the business***- As it is known supply chain management plays a vital role for every business organization towards its achievement of pre-determined goals and objectives within a limited time frame (Tijan *et al*., 2019). A properly protected and effective port will enable the business organization to develop and maintain an improvised supply chain management.
* ***Increase in business reputation***- An increase in the respective reputation of the business enables the firm to get more customers thereby earning more profit from its respective precedence. The more the reputation of a business will be there in the market the more the firm will be able to successfully attend to a sufficient customer base.
* ***Boosting the level of trade***- An improvised and secured port highly enables and facilitates the business firms in boosting the respective level of trade. It is known that the more there will trade the more the business will be able to earn profit thereby achieving their respective desires within a short interval of time
* ***Enhancing the sustainability of the business***- One of the primary concerns that lie within the business structure is enhancing the level of sustainability. It is expected for every business organization that their business sustains for a longer period of time which will help them to gain more customer base and earn more amount of income that will rapidly increase the retained earnings too (Κaltsas *et al*., 2020).

Thus all the above-mentioned set of information is the impact of proper and improvised port security towards the development of the respective business structure. As mentioned in the case study the port must improvise its level of measures thereby helping the business organization of that place to improvise its business proceedings.

## Application of Principles for port security

There lies some effective set of principles relating to the security of the ports. These principles are designed in such a way that they highly help in mitigating the risk related to the negative activities of theft, robbery, and other activities which may hamper the transfer of cargo from one country to another (Radulović *et al*., 2021). Such type of principles highly includes the process of assessing the risk, having proper control over the various managerial process of the ports, and keeping proper and trained security in the port to have a strict eye on the various activities that are taking place in that respective spot de place in that place.

Such principles highly result in protecting such places from terrorist attack and tremendously reduces the level of robbery. As mentioned in the case study the port is in high danger due to the attack that they are expecting to take place on the ship that has just been sent to voyage. It is now one of the core responsibilities of the management structure of the port to take up effective actions that will result in helping that place to be protected from any type of negative activities.

# Conclusion

In order to provide a detailed set of conclusions to the above-mentioned piece of information it can be said that the study entirely focused on the protection of the port mentioned in the case study of “ Three Quays, One Lock scenario” from the attack of the part of Greenearth that has left them. The report also focused on two major sections which are the immediate actions for the protection and the long-term business strategy that will enable the port from developing the respective structure of the various business organizations. In addition, a detailed study has also been portrayed regarding a few effective legislative measures related to the protection of the port.

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