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Research Article

Evaluating the implementation framework of the International Ship and Port Facility Security Code in the Republic of Azerbaijan

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Abstract

In the aftermath of the 9/11/2001 terrorist attacks in the USA via air transport vehicles (airplanes), security vulnerabilities also became a major concern for the shipping industry. Reacting rather quickly, the International Maritime Organization (IMO) streamlined efforts to respond to the need for a new global legal framework that addresses security risks and establishes mitigation measures to enhance security levels within the extended maritime transport system through the introduction of the International Ship and Port Facility Security Code (ISPS Code). Security issues became an inseparable part of the International Convention for the Safety of Life at Sea (SOLAS) with the incorporation of a new Chapter (XI-2: Special measures to enhance maritime security). The ISPS Code was adopted with the objective of establishing effective international cooperation between contracting governments, governmental agencies, national administrations, shipping companies, and port facilities for identifying, evaluating, and responding to security threats against ships and ports. Azerbaijan's State Maritime Agency (SMA) is the authorized organization for the implementation of the provisions of SOLAS and the ISPS Code on behalf of the government. The main aim of this research was to evaluate the specific implementation framework of the ISPS Code, including associated regulations and guidelines; it also briefly examined the different security measures within the various port facilities in the Republic of Azerbaijan. This effort was based on 2 different approaches, in which both qualitative and quantitative research techniques were used. Data was collected through interviews with person responsible for the security of ships and the port facilities and from a survey of 115 participants directly involved in maritime security, such as seafarers, port facility guards, and port personnel, as well as visitors. Overall, the implementation of the ISPS Code in Azerbaijan has been successful, and the security level has been maintained at a high level; however, there are some areas in need of improvement.

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1. Introduction

1.1 Overview and background

There are 2 very important terms that describe risks and threats within the maritime domain: "safety" and "security". These words sound fundamentally synonymous; however, it is necessary to clearly highlight their real meanings and impact. Maritime security can be defined as "*protecting measures against threats, piracy, unlawful acts and other types of attacks, taken by actors of maritime industry such as ship owners, operators, and administrators of vessels, port facilities and other maritime organizations*" (Mejia, 2002). Briefly, safety aims to protect people from maritime accidents caused by the unsafe operation/design of ships. In contrast, security focuses on protecting crews and ships (or ports) from criminal intent. There is a clear distinction between the 2 concepts: "safety" concerns "*unintentional*" outcomes with a negative impact towards ships, crews, or the environment; "security" relates to "*intentional*" acts against maritime actors.

At the confluence of maritime security and international law, the law of the sea is a complex architecture of interactive rules and processes that regulate the use of the world's seas and oceans, and international cooperation and collaboration are necessary to its success. The law of the sea, briefly, is a body of customs, treaties, and international agreements by which governments maintain order, productivity, and peaceful relations at sea. Nordfjeld and Dalaklis (2020) have very correctly pointed out that, "*One of the most important sets of maritime security regulations in international law is the International Ship and Port Facility Security Code (ISPS) Code, developed by the International Maritime Organization (IMO) after the tragic events of September 11th, 2001, and entered into force in 2004*". It is a quite self-explanatory fact that the introduction of the ISPS Code completely changed the domains of maritime and port security. The ISPS Code provides a comprehensive set of measures to enhance the security of ships and port facilities, developed in response to the perceived threats to ships and port facilities, with a focus on how to prevent/mitigate the impact of terrorist activities (International Maritime Organization, 2012).

The purpose of this research effort is to evaluate the implementation framework of the ISPS Code in the Republic of Azerbaijan, recognizing the importance of maritime security for the shipping industry and the economy of the State. The Republic of Azerbaijan has been an International Maritime Organization (IMO) member state since 1995 and a party to the International Convention for the Safety of Life at Sea (SOLAS) since 1997. The State Maritime Agency (SMA) is the authorized organization for the implementation of the provisions of SOLAS and the ISPS Code on behalf of the government of the Republic of Azerbaijan.

The SOLAS Convention is a paramount legal toolbox created by the member states of the IMO, and it relates both to the safety and the security of commercial ships. It is true that, after the 9/11 terror attacks in the USA, there were widespread concerns about the vulnerabilities of ships, especially the possibility of shipping being used as a vector for terrorist attacks. As a result, the IMO Assembly in November 2001 called for an assessment of the current international regulations on ships and port facilities against terrorist attacks and the development of measures and procedures preventing these terror acts, as well as for improvement of security offshore and ashore. The main goal of that initiative was to reduce threats to vessels, crew, cargo, and port facility personnel on board and in port areas, as well as to enhance the security of ships and port facilities and, therefore, to minimize the possibility that the shipping industry becoming a target of international terrorism.

The IMO also organized a relevant Diplomatic Conference on 9-13 December 2002; several amendments were adopted by SOLAS in this Conference, including paving the way for the new ISPS Code (IMO, 2012). The ISPS Code entered into force on 1 July 2004. It is clear that security incidents can be reduced by effective implementation of the ISPS Code and successful cooperation between government authorities, including the cooperation of different maritime stakeholders, such as shipping companies and port facilities. For example, according to Chapter XI-2 of SOLAS, Administrations of Contracting States shall set the "right" security level and ensure the provision of

security level information to ships flying under their flags and to port facilities within their territories (SOLAS, 1974).

The ISPS Code applies to different types of ships, such as passenger ships, cargo ships, and high-speed passenger crafts of 500 gross tonnage and above which are engaged on international voyages. Moreover, it applies to mobile offshore drilling units, as well as port facilities that serve the mentioned ships operating on international voyages (ISPS, 2002). The ISPS Code is divided into 2 parts: mandatory Part (A) and recommendatory Part (B). Part (A) contains detailed requirements on security for governments, port facilities, and shipping companies, and Part (B) presents recommendations on how to implement these requirements. Part (A) includes contracting governments' obligations for determining the designated authority to perform duties and responsibilities related to maritime security, which are mentioned in the Code. These responsibilities include the setting up of maritime security levels and ensuring implementation of maritime security measures in all ports (Nordfjeld & Dalaklis, 2018).

The mandatory provisions in the ISPS Code Part A contain the objectives of the Code, functional requirements, definitions, applications, security levels, and the responsibilities of both contracting governments and shipping companies. Under this Code, there are 3 different security levels, as follows: **Level 1** (Minimum appropriate protective security measures shall be maintained at all times); **Level 2** (Further specific protective security measures shall be maintained for a period when the security incident is imminent), and **Level 3** (Further specific protective security measures shall be maintained for a specific period when the security incident is imminent). Furthermore, though there are many objectives of the ISPS Code, the one which clearly stands out is the establishment of international cooperation among contracting governments, and also between governmental agencies, as well as national administrations. Additionally, shipping companies and port administrations, in respect of evaluating and dealing with security threats to ships and port facilities, can also be part of this cooperation. Moreover, the Code determines the duties and liabilities of all concerned parties that handle the responsibility of maritime security of ports and ships at national, regional, and international levels.

Contracting governments have various responsibilities under the ISPS Code, and one of the main responsibilities is the process of deciding which administrative authority will take charge of the maritime security aspects in each IMO member state. The nominated authority will handle the maritime responsibilities specified under the ISPS Code, and one of these responsibilities is to decide on the security level a port must work at: "*The regulation requires Administrations to set security levels and ensure the provision of security level information to ships entitled to fly their flag*" (Dalaklis, 2017). It is also the responsibility of the authority nominated by the contracting government to make sure that the security level decided is being applied on the ground rather than just on paper, which means their oversight goes beyond the decision-making process by including the respective control process.

1.2 Aims, objectives and methodology

The Republic of Azerbaijan has already introduced compliance measures relating to the ISPS Code within its port facilities. The main aim of this research was to evaluate the specific implementation framework of the ISPS Code, including associated regulations and guidelines; it also briefly examined the different security measures within the various port facilities. This effort was based on 2 different approaches, in which both qualitative and quantitative research techniques were used. A very brief literature review of International Conventions, Codes, and National Legislation of the Republic of Azerbaijan on maritime security was conducted; furthermore, articles by experts on maritime security, identified in books, journals, and websites, were used to identify the applicable global standards of the ISPS Code. This qualitative research technique was used to facilitate a comparison between what has been implemented until now within the country under

discussion and what exactly the global "expectations" are regarding the implementation of the ISPS Code.

The quantitative research technique involved primarily data collection from relevant maritime stakeholders/governmental agencies. These statistics are reliable sources, reflecting the level of security within port facilities and on-board ships visiting them; for instance, the increase or decrease of security incidents can help in defining the effect of implementing high-security measures as required by the ISPS Code. The collected data involved statistics and documents about the ships and port facilities operating within the Republic of Azerbaijan. Additionally, relevant information was used to examine which of the ISPS Code principles and guidelines are being implemented, based on the annual reports of the State Maritime Agency in Azerbaijan. A research interview and questionnaires distributed among the auditors of the Maritime Agency and a certain number of the security guards at the port facilities/crew of the ships that visit these ports, were also used.

Figure 1 Map of the Caspian Sea. Source: https://www.worldatlas.com

2. Implementation of the ISPS Code in Azerbaijan

2.1 Geography and port overview

The Republic of Azerbaijan is located on the west coast of the Caspian Sea[†]. The country has approximately 713 km of coastline (on the Caspian Sea), and there also available transport links through the Volga-Don channel to the Black Sea and the Mediterranean Sea (SMA, 2016). The

[†]In **Figure 1**, the Caspian Sea and adjacent coastal states are presented. The Caspian is surrounded by the Russian Federation to the north/northwest, the Islamic Republic of Iran to the south, Kazakhstan and Turkmenistan to the east, and Azerbaijan to the west.

wider region is rich in oil and gas reserves and, in its geopolitical equation, the respective transport pipelines should also be included. A Baku-Tbilisi-Ceyhan pipeline (BTC), with a capacity to transport 1 million b/d, was inaugurated in 2005. This pipeline is 1730 km in length, reaching the Turkish coast of the Mediterranean Sea. In 2010, Kazakhstan and Turkmenistan also joined the BTC to export their oil. Furthermore, since 2007, another vital project in the region, a Baku-Tbilisi-Erzurum gas pipeline, has served to export Caspian Sea gas to Europe (Ibrahimov, 2010).

According to the Merchant Shipping Code of the Republic of Azerbaijan, the State Maritime Agency (SMA), under the Ministry of the Transport, Communications, and High Technologies of the Republic of Azerbaijan, is the authoritative body on executing maritime transport policy (Merchant Shipping Code, 2006). Moreover, the ISPS Code principles are implemented by the State Maritime Agency (Statute of the Agency, 2018). The SMA required all port facilities to implement the requirements of the ISPS Code. Although initially there were 4 port facilities implementing the requirements of the Code, the number of declared port facilities has increased over time. Today, 8 declared port facilities accept ships engaged in international voyages and mobile offshore drilling units (IMO, 2019). In **Figure 2**, the port of Baku (which includes the port facilities "Baku International Sea Trade Port" CJSC, Zykh Dry Cargo Sea Port, and Puta Sea Port) is presented.

Figure 2 Map of the port of Baku. Source: http://www.worldportsource.com

The Republic of Azerbaijan has adopted more than 250 national rules and regulations regarding the maritime industry, marine protection, marine transportation, safety and security at sea, and the welfare of seafarers through its parliament, presidential decrees, Cabinet of Ministers decrees/decisions, SMA regulations/directives, and various other governmental organizations (MOJ, 2019). The fundamental national law in the maritime field within the Republic of Azerbaijan is the Merchant Shipping Code of the Republic of Azerbaijan (MSC), which includes all types of maritime procedures. However, the MSC only covers indirect provisions on maritime security. According to Articles 6-1 and 18 of the MSC, all Azerbaijan-flagged international seagoing vessels

shall be issued an International Ship Security Certificate, following exactly the requirements of the ISPS Code.

On the other hand, the Republic of Azerbaijan adopted "the Law on Sea Ports" on 18 April, 2014, for regulating the construction of seaports, the operations of these ports, and their control by the State in the territorial waters of Azerbaijan. Article 13 of the relevant law directly addresses the security of port facilities, which includes ensuring security measures during unlawful acts against port facilities, investigation procedures of these unlawful acts, and the following of international rules and regulations on maritime security. The provisions of the ISPS Code and national legislation on port facility security affected the Baku port and 8 port facilities, all of which are listed in **Table 1** (IMO, 2019).

Table 1 Declared port facilities in Azerbaijan. Source: https://www.gisis.imo.org

No.	Port	Port facility name	Description	Initial approval	Last updated
1.	Baku	"Baku International Sea Trade Port" CJSC	A passenger ship, passenger high-speed craft, cargo high-speed craft, oil tanker, bulk carrier, cargo ship	10/07/2004	15/02/2017
2.	Baku	"Cenubtikintiservis" OJSC	A passenger ship, passenger high-speed craft, cargo high-speed craft, oil tanker, mobile offshore drilling unit, cargo ship	28/06/2004	04/03/2014
3.	Baku	Heydar Aliyev Baku Deepwater Jackets Factory	Mobile offshore drilling unit, cargo ship	12/04/2005	04/03/2014
4.	Baku	"Azerbaijan Caspian Shipping" CJSC, Caspian Sea Oil Fleet	A passenger ship, passenger high-speed craft, cargo high-speed craft, oil tanker, mobile offshore drilling unit, cargo ship	16/08/2004	06/02/2006
5.	Baku	Puta Sea Port	Cargo high-speed crafts, an oil tanker, bulk carrier, cargo ship	28/02/2014	15/02/2017
6.	Baku	Zykh Dry Cargo Sea Port	Cargo ships	24/05/2015	14/02/2017
7.	Baku	"Baku Hovsan International Sea Port" OJSC	Cargo ships	17/09/2018	Not updated
8.	Baku	Zira Sea Port	Mobile offshore drilling unit, cargo ship	10/10/2018	Not updated

2.2 National legislation on maritime security

According to Article 4.3 of "Regulations on ensuring of security during unlawful acts at ports" (which was adopted by the Decree of Cabinet of Ministers on 1 October 2015), during unlawful acts occurring at port facilities, a command post shall be established under the command of the Ministry of Internal Affairs; this post shall include the SMA, the designated Port Facility Security Officer (PFSO), and representatives of other national security services, depending on the characteristics of the unlawful act. Securing passengers and crew, defusing persons who have

hijacked a ship and carrying out security measures for securing other ships and port facilities are the main duties of this command post. Furthermore, during terror acts, security operations against these acts shall be conducted according to the provisions of "the Law on the Suppression of Unlawful Acts against Terrorism".

The SMA has not authorized any Recognized Security Organization (RSO) to perform the Port Facility Security Assessment (PFSA), to develop the Port Facility Security Plan (PFSP) and conduct its revision, or to conduct verifications and audits. This approach creates extra pressures and responsibilities for the SMA in performing the PFSA and the Ship Security Assessment (SSA), as well as verifications, revisions, and approvals of the PFSP and the Ship Security Plan (SSP), especially as there is a limited number of qualified staff available. However, in order to strictly protect the national security policy, the SMA does not plan to authorize any RSOs to evaluate/designate maritime security measures, as this agency is the sole responsible organization according to the provisions of "the Statute on the State Maritime Agency under the Ministry of the Transport, Communications and High Technologies of the Republic of Azerbaijan", adopted by the decree of the President on 22 May, 2018.

On the other hand, the SMA has authorized various training and education centers to provide courses and training regarding the ISPS Code and maritime security. In these centers, ship crews and port facility personnel acquire knowledge on the essential requirements of SOLAS Chapter XI-2, the ISPS Code, and national legislation. Nevertheless, according to the SMA requirements, a Company Security Officer (CSO) and/or a PFSO should attend extra training for better understanding of the ISPS Code's requirements. However, the SMA is not the sole national authority for the protection of port facilities and the security of territorial waters/borders. The SMA does not have a mandate or the resources to carry out "protection functions". These activities/functions are conducted by other governmental organizations, such as the navy, police, border services, and national security services.

Following the established guidelines and policies, during security incidents, the PFSO shall attend for the suppression and investigation of these events for improvement of the PFSP and shall report to the SMA/record appropriately these security incidents. After receiving the information about the security incident at the port facility, the SMA must follow the provisions of "Regulations on the ensuring of the security during unlawful acts at the ports"; the SMA, along with the other national security services, will check the authenticity of the report, verify the information, collect extra data, analyze them and, after evaluation of the risks, carry out the following measures:

1. If the report is not accurate, port operations shall continue properly;
2. If there is a high risk of security incident, instructions shall be given to the ships and the port facilities about the changing of security levels; additionally, security measures shall be strengthened on the vessels, in the port facilities, and in adjacent areas to the port facilities;
3. Moreover, all types of vehicles within the areas of a port facility shall be removed, and access to restricted areas shall be restricted; additionally, extra security measures shall be carried out, as described in the PFSP.

The port facilities of Azerbaijan accept non-SOLAS vessels and ships that are not engaged in international voyages that fly the flag of the Republic of Azerbaijan. There are no mandatory IMO regulations for regulating the security of these types of ships. However, the IMO has developed the so-called "Non-Mandatory Guidelines on security aspects of the operation of vessels which do not fall within the scope of SOLAS Chapter XI-2 and the ISPS Code" in 2008 by the document MSC.1/Circ.1283. In this document, it is stated that: "*Member States and other authorities may wish to engage with operators of non-SOLAS vessels and relevant organizations in developing security initiatives with respect to education, information sharing, coordination, and outreach programmes. Member States and other authorities may wish to consider establishing programmes to improve vessel operators' security awareness and to promote links with the Administration's maritime security services*". Although the IMO has not adopted any mandatory

regulations on the security of non-SOLAS vessels, the government of Azerbaijan has gone further and developed national legislation that also covers these types of vessels. In other words, the provisions of "Regulations on the ensuring of the security during unlawful acts at the ports" apply to all ships registered in the State Ships Registry and the Bareboat-Charter Registry of the Republic of Azerbaijan and sailing under the state flag, regardless of size, as well as foreign-flagged ships within the areas of the port facilities of Azerbaijan.

Table 2 Direct regulations which affect maritime security in the Republic of Azerbaijan. Source: Authors, 2019.

No.	Act	Name of legislation	Date of adoption	Description
1.	The national law number 96- VQ	The Code of Administrative Violations of the Republic of Azerbaijan	29 December 2015	The fines and sanctions for breaking the rules of and regulations on the maritime security
2.	The national law number 945- IVQ	The Law on Sea Ports	18 April 2014	Ensuring security measures during unlawful acts against port facilities, investigations procedures of these unlawful acts, and following international rules and regulations on maritime security
3.	Decree of the President	The Statute on the State Maritime Agency under the Ministry of the Transport, Communications and High Technologies of the Republic of Azerbaijan	22 May 2018	The duties and responsibilities of the SMA for conducting maritime security measures
4.	Decree of the Cabinet of Ministers	Regulations on the security of ports and port facilities	16 October 2014	The provisions for the conduct of PFSA, verifications of the port facilities, revision, and approval of PFSP
5.	Decree of the Cabinet of Ministers	Regulations on the ensuring of security during unlawful acts at ports	1 October 2015	The provisions for security measures during unlawful acts against port facilities
6.	Decree of the Cabinet of Ministers	Regulations on navigation in the territorial waters of the Republic of Azerbaijan	8 September 2015	To control the ISSC of all Azerbaijan-flagged and foreign international seagoing vessels

Furthermore, there are special provisions in the national legislation of the Republic of Azerbaijan on the fines and sanctions for the breaking of rules and regulations on maritime security. According to Article 307 and 315 of "the Code of Administrative Violations of the Republic of Azerbaijan", port facilities operating without a Statement of Compliance of a Port Facility and ships operating without an International Ship Security Certificate (ISSC) shall be subject to sanctions by the relevant national authority. In addition, **Tables 2** and **3** illustrate all the national rules and regulations that directly or indirectly address maritime security within the territorial waters of the Republic of Azerbaijan. Overall, these national legislations are strong enough to secure port

facilities which are located in Azerbaijan and Azerbaijan-flagged international seagoing ships. However, there is a need to increase those special security measures applied to non-SOLAS vessels; it is true that the current situation is good enough, but the focus should always be on improving the security levels even further.

Table 3 Indirect regulations which affect maritime security in the Republic of Azerbaijan. Source: Authors, 2019.

No.	Act	Name of legislation	Date of adoption	Description
1.	The national law number 146- IIQ	Merchant Shipping Code of the Republic of Azerbaijan	22 June 2001	All Azerbaijan-flagged international seagoing vessels shall be issued ISSCs
2.	Decree of the Cabinet of Ministers	Statute on the inspections of the ships	4 April 2013	Inspection of availability of ISSCs on board
3.	Decree of the Cabinet of Ministers	Statute on the Sea Port Captains	4 April 2013	Inspection of availability of ISSCs on board
4.	Decree of the Cabinet of Ministers	Statute on the Ships Agents	8 July 2015	To provide Port State Control (PSC) with the necessary documentation of ships which is required by maritime security
5.	The State Maritime Agency	Statute on the Minimum Safe Manning of Ships	27 February 2013	During establishing appropriate minimum safe manning for ships, the provisions of SSP shall be taken into consideration by the SMA and the shipping companies

Finally, it is necessary to highlight that all the 5 coastal states of the Caspian Sea already signed a multilateral agreement on cooperation in the field of security on 28 November 2010. This agreement includes provisions for combating terrorism, piracy, organized crime, weapon smuggling, the transportation of drugs, psychotropic materials, and other types of narcotic substances on board ships, and illegal migration. Although this formal agreement should have a positive impact on security measures at the regional level, unfortunately, there is no coordination/cooperation on the conduct of the associated security activities (Agreement on Cooperation, 2010).

2.3 Possible security threats

Azerbaijan's coastline and territorial waters are considered as very secure. The sea area of Azerbaijan is busy with ship traffic and oil/gas production, along with their transportation and supporting infrastructure; moreover, the oil and gas industry covers the major part of the state`s income. In spite of the numerous oil terminals, oil and gas pipelines, and other infrastructure/installations, there are no thefts, attacks on important oil and gas installations, or unauthorized access to these restricted areas. The government ensures a rigid security system with the support of the police, navy, border services, and national security services, and also by effectively integrating into the wider framework security services offered by the private sector.

It is indicative that there is no record of events like terrorism, piracy, or even vandalism on the Azerbaijan side of the Caspian Sea. However, there might be certain security breaches, such as illegal migration, weapon smuggling, theft, or unauthorized access to port facilities and ships.

Furthermore, mobile offshore drilling units, as well as fixed oil and gas platforms, which are operated for oil and gas production might be target of an attack. For that reason, the SMA periodically controls security measures at port facilities and on board ships and mobile offshore drilling units. Nevertheless, there are no security measures mentioned in the national and international legislation on the security of fixed oil and gas platforms operated at sea. In addition, security threats to port facilities and ships might include transportation of drugs, psychotropic materials, and other types of narcotic substances on board ships in cargo. For that reason, the SSPs and PFSPs cover special security measures against these types of threats. However, until now, no security threats or incidents have been recorded on board Azerbaijan-flagged ships or in port facilities within the territorial waters of the Republic of Azerbaijan.

3. Analysis of collected data

3.1 Selection of interviewee

Data was collected by interview. The person interviewed was Mr. Seymur Mirzayev, who is responsible for the security of ships and port facility security within the Republic of Azerbaijan. The reason for choosing him was to acquire accurate information from the national legislator's point of view concerning the maritime industry and, specifically, the security aspect of it.

3.1.1 Analysis of data collected through the interview

Mr. Mirzayev's answer to the interview questions were very clear in regard to the type of maritime threats that have a high likelihood to exist. He stated that the Caspian Sea and the areas around it are generally quiet, and there no major security threats like piracy, sabotage, or vandalism; however, threats like stowaways, weapons smuggling, and unauthorized access to port facilities are highly possible. He also stated that there had not been a single security breach recorded so far. The responsibility of protecting the 8 port facilities in the state is not limited to the PFSOs and other security guards under their oversight. The government provides "additional" security protection through police officers, customs officers, and border services, which are extra security personnel that help the PFSOs.

Mr. Mirzayev put forward the notion that the extra security measures are causing problems with other stakeholders, and his agency has received complaints from ships coming to port facilities and from the truck drivers as well. He said that the effects of the extra security measures put in place as required by the ISPS Code were both positive and negative. He elaborated that the positive effect was the trust gained from ship-owners and charterers that their cargo is secure and in safe hands; nevertheless, the negative effect was evident through the extra time needed for cargo handling, which leads to delay in ship operations. In regard to the PFSP and its review, he stated that the PFSP is verified annually by the SMA auditors during annual verifications of the port facilities, which is a requirement under the national legislation. Adding to that, the auditors verify the changes applied to improve the PFSP every 5 years, as required by the provisions of the national legislation.

Mr. Mirzayev mentioned that the SMA did not face any major challenges while implementing the ISPS Code provisions within the 8 different port facilities in the country. However, he also highlighted that a small number of security guards assigned to protect and secure the port facilities did not have adequate knowledge about the ISPS Code and its requirements; therefore, the SMA carried out training programs and exercises to familiarize the security guards with the ISPS Code provisions and guidelines. He added that there is an annual exercise that involves one of the shipping companies and one of the port facility's employees in which they familiarize all personnel involved in the event, such as shipping company personnel and the port security guards, with the ISPS Code requirements/possible security threats. Moreover, on completion of each exercise, there is a report submitted by the SMA to the port management and the shipping company detailing the outcomes and providing recommendations for further improvement.

He also pointed out that shipping companies are the only stakeholders that take part in the security exercises.

Mr. Mirzayev stated that, despite a multilateral agreement on cooperation in the field of security in the Caspian Sea signed by 5 Coastal States, there is no cooperation among these states in regard to maritime security, not even concerning information sharing. Moreover, there are no maritime security exercises between the neighboring states in that region. His response towards the issue of authority that the PFSOs have within the state's port facilities was clear on the importance of the PFSOs and their role in ports, and that they have overriding authority in the decision-making process and have the power to decide what security equipment needs to be provided. In addition to that, the PFSO is an important member of any security investigation carried out by the port authority, and such privilege is supported by the national legislation. He said that the ISPS Code provisions in Part (A) are the minimum requirements. Therefore, the national legislation was the major source of the security measures taken by the SMA to enhance security within port facilities, and some of the guidelines in Part (B) were followed and applied in the state's port facilities as well. According to Mr. Mirzayev, the security guards report to the PFSOs whenever they experience any security issue within the ports, and they inform the PFSOs about any weaknesses or vulnerabilities they believe to be evident, which proves their contribution to the PFSP. He believes that the ISPS Code has enhanced the level of security within the state's port facilities through the implementation of its provisions. For instance, after implementing the provisions, the port facilities increased the numbers of security guards, identified restricted areas, and strengthened control at the access points.

3.2 Analysis of survey questionnaire

3.2.1 The structure of questionnaire

The survey questions were chosen carefully to facilitate the research effort and to cover different specializations within 2 state port facilities, such as seafarers, security guards, and port facility personnel. The survey was conducted at 2 different port facilities: the first one was the Zykh Dry Cargo Sea Port, and the second was the Azerbaijan Caspian Shipping (CJSC), Caspian Sea Oil Fleet. The number of people who participated in the research was 115 participants, of which seafarers represented more than 50 %, and security guards accounted for more than 25 %; the rest represented port personnel, Azerbaijan Caspian Shipping Company, and Flag States surveyors, as shown in **Figure 3**. The experience of the participants in their respective fields varied. The majority of them had less than 10 years of experience, with a total number of 72 participants, whereas 19 participants had between 10 - 15 years' experience, and 24 participants had more than 15 years of experience.

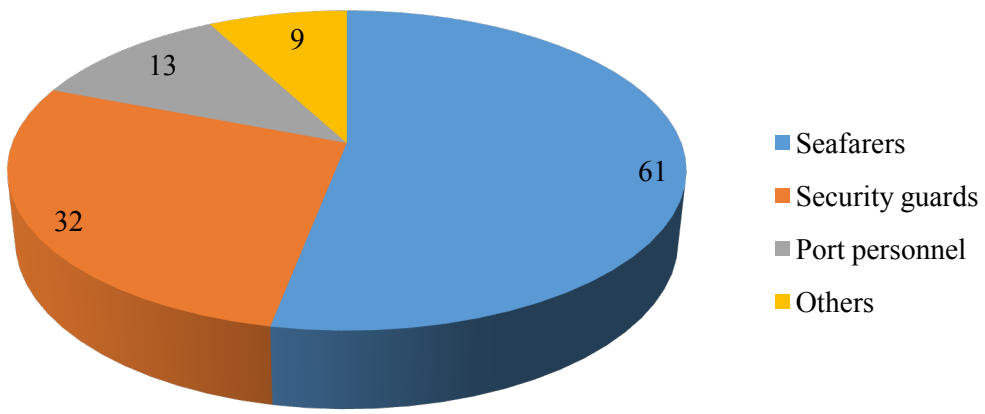

Figure 3 Occupation of survey participants. Source: Authors, 2019.

3.2.2 Analysis of data collected through questionnaire

The participants held mixed views about the security level, leaning towards the medium option. Moreover, 13 % of the participants believed that the security level was weak, whereas 24 % believed it was strong (see **Figure 4**). The results of the survey also showed that 49 participants out of 115 believed that the security measures taken by the port authority had a negative effect on the port's operations, and 44 participants believed there was no effect. Moreover, 86 % of the participants stated that they were inspected when entering the port- the rest of the participants (14 %) said that they were not inspected- and with these inspections also comes the identification card (ID) check. Such a figure shows that the security level in the port facilities is very good; however, there is room for improvement through awareness campaigns, which will definitely enhance security by creating public awareness of the specific types of threat. Eighty-seven percent of participants mentioned that their ID cards were checked before they entered the port premises, and 12 % said that they were not checked. According to the participants, the company personnel and the port employees are issued pass cards.

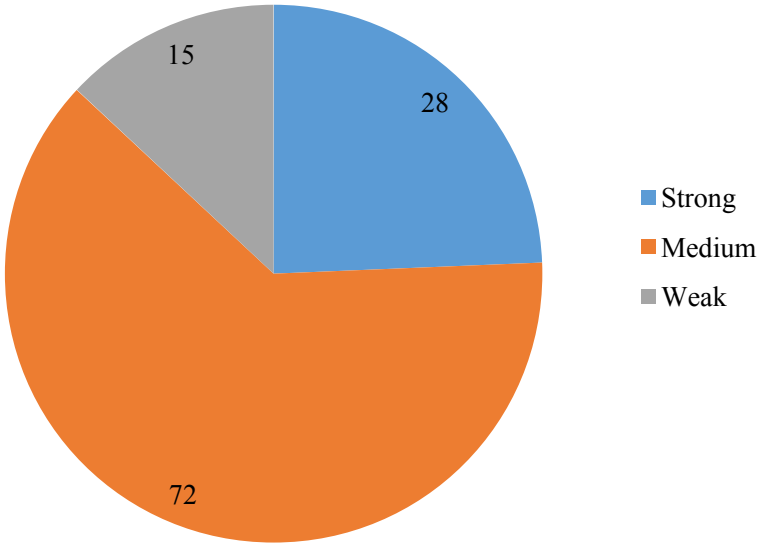

Figure 4 Evaluation of security level at port facilities. Source: Authors, 2019.

Furthermore, 94 of the participants pointed out that they were not able to move freely within the port facilities without authorization, and that represented almost 82 % of the total participants, which shows that the remaining 18 %, representing 21 participants (port personnel and company employees), could easily move around the port. In addition to that, 51 participants evaluated the cooperation between the PFSOs and the SSOs as being strong, whereas 48 participants evaluated it as weak, and the remaining participants were split into 2 categories. Three people said such cooperation did not even exist, and 13 people said they did not know whether there was cooperation or not (see **Figure 5**). Such statistics clearly demonstrate that the communication and cooperation between PFSOs and SSOs need to be improved, with an indicative example of setting up a related workshop, with the aim to improve collaboration. Regarding the availability of security equipment to the security guards, 87 % believed that the guards were adequately equipped with security tools and equipment, and the remaining 13 % held the opposite view.

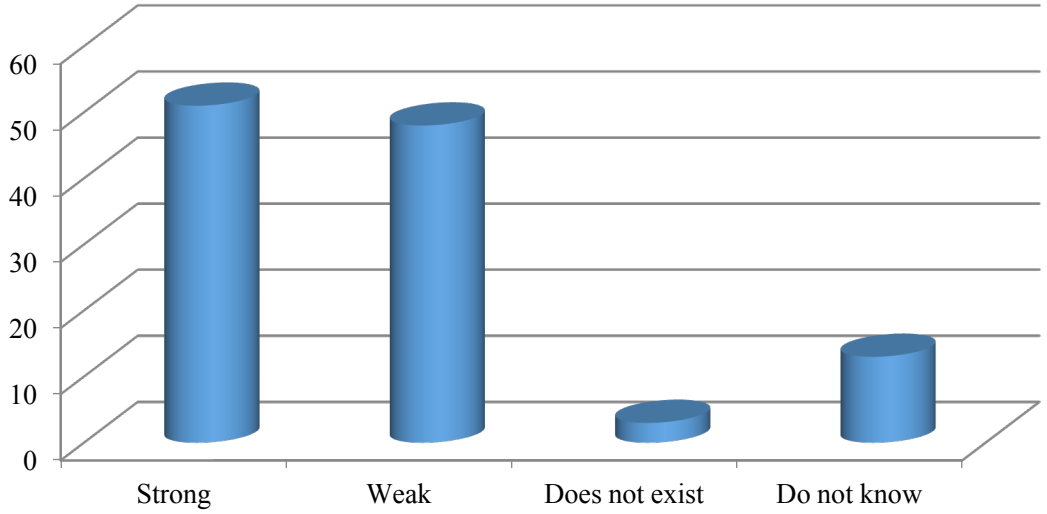

Figure 5 Communication and cooperation between SSOs and PFSOs. Source: Authors, 2019.

The survey questions which were addressed exclusively to the security guards at the 2 port facilities previously mentioned are also interesting. In their responses in regard to their "regular" involvement in the security meetings, all the security guards stated that they sometimes take part in these meetings, but not always. Moreover, all the security guard participants said that they had security training programs in order to improve their skills. This shows the skills of the security guards in terms of carrying out their duties and responsibilities is very good; nevertheless, there is room for improvement through advanced training courses for selected key personnel involved. Furthermore, all of the security guards stated that they were involved in security exercises to enhance the level of readiness to deal with security threats. In addition to this, they acknowledged that they were fully aware of the most vital facilities within the ports, as they had been instructed and directed by the PFSOs.

In regard to the survey questions which were addressed exclusively to seafarers, all seafarers agreed that the 2 port facilities, including the anchoring and berthing areas, were very secure and adequately staffed, with no vulnerable areas. 47 seafarers out of 61 in total acknowledged that security guards were present every time they carried out cargo handling operations, whereas 8 seafarers stated that there were no security guards visible to them when they did so, and the remaining 6 said that they sometimes saw security guards. Moreover, 67 % of the participated seafarers stated that they got instructions from the PFSOs regarding what was allowed and what was not allowed for them while they were berthing in port, such as the areas they were allowed to move within and the shore leave process, whereas 26 % of them said they did not receive any instructions, and the remaining 7 % stated that they sometimes received instructions (see **Figure 6**). In addition to this, 37 seafarers out of the 61 said that they got information about the security levels of the port facilities they are operating within, and the remaining 24 said that they did not get such information.

In general, the security measures which were put in place by the government of Azerbaijan are working very well, as the business model is relatively stable. Future changes are not expected to be tremendous, as the fleet of the state is not expected to experience a dramatic increase in that small area, nor in shipping density; therefore, the current system requires a slight improvement so as to cope with the expected small changes, such as improving the communication and cooperation issues between the different stakeholders, as well as increasing the number of security guards.

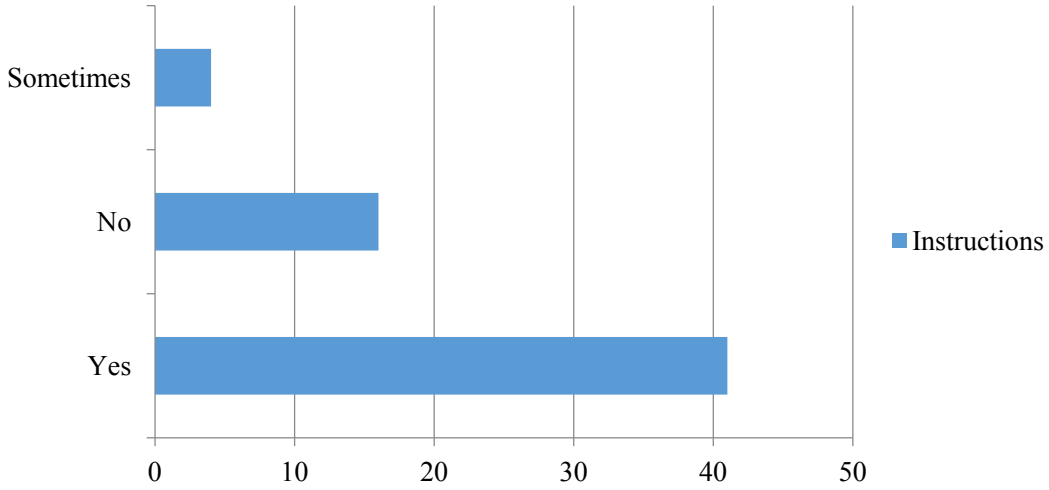

Figure 6 Statistics about getting instructions from port facility security guards while berthing in port facilities. Source: Authors, 2019.

The Republic of Azerbaijan has taken extra steps and has gone further than the IMO requirements in terms of security measures; however, the policy works in harmony with an international policy, which makes the Caspian Sea and the geographical areas around it more secure and stable.

4. Conclusion and recommendations

Through the general overview of the global maritime legal instruments, and the analysis of the gathered information from the interview and the survey conducted in the Republic of Azerbaijan, there are several observations made that are related to the security aspects within the state's ports. Moreover, the process of comparing the findings of the research and the national legislation in line with the ISPS Code provisions was valuable in terms of assessing the conformity between the requirements of the ISPS Code and what is being applied in 8 local port facilities. Adding to this, the information gathered from the interview and the surveys was a valuable input for the process of evaluating the implementation framework of the ISPS Code. According to national legislation, the SMA is a central executive power that is responsible for executing maritime transport policy, and is also responsible for the implementation of, and compliance with, the ISPS Code at all security levels. In addition to this, the SMA is responsible for decision-making, coordination, and execution of all security changes and attending all types of security operations in line with national security services, police, navy, national border services, and emergency services. The Republic of Azerbaijan, through the SMA, has implemented the ISPS Code mandatory provisions in Part (A) to their full extent, and made partial use of the non-mandatory guidelines in Part (B). However, the implementation process was the following step after adopting national legislation that is compatible with the ISPS Code in order to enforce it within the local port facilities. The SMA, through its employees, is taking major steps in terms of supervision and monitoring on-ground security-related efforts to ensure the ports' compliance with the ISPS Code provisions.

Despite the fact that the Caspian Sea is rich in oil and gas, the surrounding area (including the Republic of Azerbaijan) is not presently facing any major security threats such as piracy, terrorism, or acts of sabotage. Such threats are also rather unlikely to happen in the near future, by factoring in the overall geopolitical situation; however, there is still a high possibility of encountering other types of security threats, such as stowaways, the smuggling of weapons, and unauthorized access to the state's port facilities. The statistics of security breaches support the fact

that the Caspian Sea area is secure, as not a single incident has been recorded; however, this does not ensure the absence of security threats in the future. Furthermore, although the energy resource sector is extremely active, there are neither national nor international requirements regarding the protection of fixed oil and gas platforms. On the positive side, the SMA has introduced extra security measures in addition to the ISPS requirements in regard to assigning PFSOs and other security guards, and such extra measures are based on the national legislation in which other agencies (police officers, border service officers) take part in securing the different ports.

Security of these port facilities was enhanced through issuing pass cards to the port employees and the security guards, as they are authorized to enter the port facilities to carry out their daily work; however, such pass cards are not being inspected to see if the holder of the card is actually the authorized person, and this explains the survey participants' point of view, in which only 24 % believed that the security level was strong, whereas the majority believes it was neither strong nor weak. This issue can be resolved through training programs for the security guards that will better familiarize them with the national/international policies and requirements. Furthermore, the survey showed that approximately 14 % of the people entering the port are not being inspected, as they are pass cardholders and, without inspecting the information on the card, and the person holding it, the possibility of unauthorized access is high. The state's port facilities have security measures in place for the 3 different levels established by the ISPS Code provisions; however, the cooperation among the neighboring countries in the region is very limited despite the fact that there is a regional agreement between the 5 coastal states. Adding to this, there are no security exercises on a regional scale to increase the level of communication and cooperation among these neighboring states whereas, at the local level, there is good communication and an acceptable level of cooperation between the different stakeholders and the port authorities. Such cooperation is vital, especially for the flow of information, which helps the states to increase the security of the ports and ships whenever there is an imminent threat, and shift from level 1 to level 2, or 3, if necessary.

The PFSP is being tested and reviewed by the SMA at all of the state's port facilities, in full compliance with the provisions of the ISPS Code. This process is being carried out annually by the SMA auditors, and also every 5 years, as required by the national legislation. Moreover, the SMA demands that the port facilities recruit competent PFSOs to carry out the security aspects within port facilities and assume responsibility for the PFSP and its implementation. The PFSO of each port facility has been given the authority to decide on the security equipment needed to fulfil that task. The PFSO is also involved in the security planning process and is part of the investigation team if there is a security incident within the port. Although all the security guards involved in the survey confirmed their involvement in the training programs, the challenge, as per the interviewed personnel, was maintaining the presence of qualified security guards who are well familiarized with the ISPS Code and its provisions during the rotation process. The survey results showed that security guards were being trained and getting involved in security exercises, such programs were limited to the local stakeholders and did not involve regional stakeholders. In addition, 77 % of the seafarers surveyed confirmed that security guards were well distributed around the port facilities, especially near important facilities. Moreover, the seafarers admitted that they received instructions from security guards regarding what was allowed and what was not allowed in terms of movement within port.

Overall, the implementation of the ISPS Code in Azerbaijan has been successful, and the security level has been maintained at a high level by the responsible organizations. An extended number of legal acts was adopted by the Government for effective implementation of the Code, and certain provisions of national legislation in the maritime field were amended to facilitate the application of the Code. These regulations describe the identification and evaluation of necessary infrastructure for protection, identification of possible threats, weaknesses, and vulnerabilities to these infrastructures and the selection of countermeasures for reducing vulnerabilities and mitigation of the consequences. In general, the government of Azerbaijan and the SMA have made

significant progress in regard to the implementation of SOLAS Chapter XI-2 and the ISPS Code; however, there are some areas that require more governmental concerns, and other areas in need of improvement.

Firstly, regional cooperation and coordination are vital to enhance the security among the neighboring states, which can be achieved by arranging annual maritime security workshops and conducting relevant exercises. Secondly, the importance of fixed oil and gas platforms to the national economy is undeniable and, due to the absence of national acts to protect such vital resources, there is a need for national legislation to nominate a governmental body to take charge of securing these fixed platforms and establish specific security mitigation measures to be applied and monitored. Therefore, there is a need for short, medium, and long term plans to overcome this issue. The short term plans could involve training programs, the medium term plans could involve the introduction of new legislation, and the long term plans might deal with strengthening the relevant infrastructure. Thirdly, the present level of communication between PFSOs and SSOs is not very effective, as attested by the survey participants, half of whom believed that such communication was weak. Therefore, this is an area for improvement for the PFSOs, who should focus on strong cooperation and communication with the SSOs, as required by Article 17.2 of the ISPS Code. This issue could be resolved through workshops between the mentioned stakeholders. Fourthly, the security guard rotation process is causing a major problem, as the trained security guards are being moved and transferred continuously once they gain knowledge of the requirements of the ISPS Code and the national legislation on maritime security. Therefore, the security guards should be trained and maintain their positions for long periods of time; moreover, they should receive more advanced training programs to enhance their skills, instead of repeating the same basic training programs along with the new incoming security guards.

References

Dalaklis, D. (2017). *Safety and security in shipping operations*. In Visvikis, I. D., & Panayides P. M. (Eds.). Shipping operations management (pp. 197-213). Springer.

Ibrahimov, R. (2010). Azerbaijan energy strategy and the importance of the diversification of exported transport routes. *Journal of Qafqaz University, 29*, 23-29.

International Maritime Organization. (1974). *International convention for the safety of life at sea*. London, UK.

International Maritime Organization. (2002). *International ship and port facility security code*. London, UK.

International Maritime Organization. (2008). *Non-mandatory guidelines on security aspects of the operation of vessels which do not fall within the scope of SOLAS Chapter XI-2 and the ISPS Code (Resolution MSC.1/Circ.1283)*. London, UK.

International Maritime Organization. (2010). *Guidelines on security-related training and familiarization for port facility personnel (MSC.1/Circ.1341)*. London, UK.

International Maritime Organization. (2012). *Guide to maritime security and the ISPS code*. London, UK.

International Maritime Organization. (2018). Global Integrated Shipping Information System (GISIS). Retrieved from https://gisis.imo.org/Public/ISPS/ReportPopupShell.aspx?Title=Declared+port+facilities&Country=&ID=ISPS_Report_LFACILITIES

International Maritime Organization. (2019). *Maritime security*. Retrieved from http://www.imo.org/en/OurWork/Security/Guide_to_Maritime_Security/Pages/Default.aspx

Mejia, J., & Quibranza, M. (2002). *Defining maritime violence and maritime security.* Malmö, Sweden: WMU Publications.

Nordfjeld, A., & Dalaklis, D. (2018). *Assessing the need of implementing ISPS code instruments to Maritime Customs Units*. Retrieved from https://www.researchgate.net/publication/

329427158_Assessing_the_need_of_implementing_ISPS_Code_instruments_to_Maritime_Customs_Units

President of Russia. (2010). *Agreement on cooperation in the field of security in the Caspian Sea*. Retrieved from http://kremlin.ru/supplement/785

Republic of Azerbaijan. (2006). *Merchant shipping code of the Republic of Azerbaijan*. Baku, Azerbaijan.

Republic of Azerbaijan. (2015). *The Code of Administrative Violations of the Republic of Azerbaijan*. Baku, Azerbaijan.

The Cabinet of Ministers of the Republic of Azerbaijan. (2013). *Statute on the inspections of the ships.* Baku, Azerbaijan.

The Cabinet of Ministers of the Republic of Azerbaijan. (2014). *Regulations on the security of the ports and port facilities.* Baku, Azerbaijan.

The Cabinet of Ministers of the Republic of Azerbaijan. (2015). *Regulations on the ensuring of the security during unlawful acts at the ports.* Baku, Azerbaijan.

The Cabinet of Ministers of the Republic of Azerbaijan. (2015). *Regulations on the navigation at the territorial waters of the Republic of Azerbaijan.* Baku, Azerbaijan.

The Ministry of Justice of the Republic of Azerbaijan. (2019). *Unique internet online base of normative legal acts*. Retrieved from http://e-qanun.az

The President of the Republic of Azerbaijan. (1999). *The law on the suppression of unlawful acts against the Terrorism.* Baku, Azerbaijan.

The President of the Republic of Azerbaijan. (2014). *The law on the sea ports.* Baku, Azerbaijan.

The President of the Republic of Azerbaijan. (2018). *Statute of the state maritime agency under the Ministry of the Transport, Communication and High Technologies of the Republic of Azerbaijan.* Baku, Azerbaijan.

The SMA. (2016). *Strategy for implementing IMO instruments 2016-2021*. Baku, Azerbaijan.

World Atlas. (2019). *Caspian sea: Map & Details.* Retrieved from https://www.worldatlas.com/aatlas/infopage/caspiansea.htm

World Port Source. (2019). *Port of Baku*. Retrieved from http://www.worldportsource.com/ports/maps/AZE_Port_of_Baku_2192.php