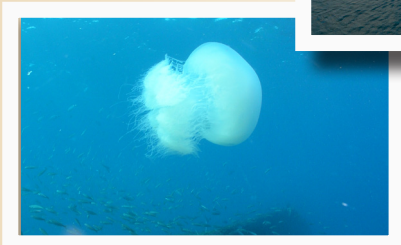
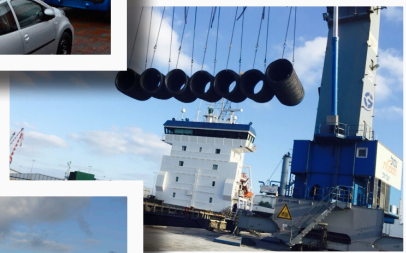
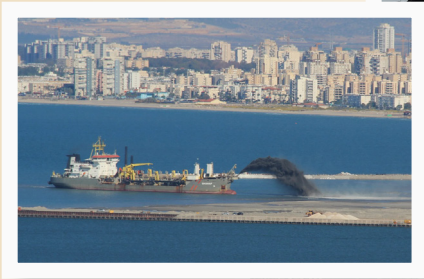


# MARITIME STRATEGIC EVALUATION FOR ISRAEL 2018/19

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## The Activity in Israel's Ports

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### General

This chapter summarizes the activity in Israel's ports in 2017<sup>2</sup> and is based on data from the Ports and Shipping Authority (ASP) Annual Statistical Abstract for 2017. The chapter also includes issues and trends in the ports during 2018 and primarily with regard to the strategic preparations of the Haifa and Ashdod port companies prior to the commencement of operations of the Hamifratz and Hadarom ports, which is expected in 2021.

The ASP's Statistical Abstract is divided according to four types of loading/unloading of cargo:

1. Containers
2. General cargo (metal, wood, paper and vehicles).
3. Bulk
4. Automated facilities, such as for grain, fuel, acids, export of phosphates and potash, cement, etc.

This chapter includes the following sections:

- Analysis of the activity in the ports in 2017 based on data from the ASP Statistical publication.
- The status of the construction of the Hamifratz and Hadarom ports.
- The preparations of the Haifa Port Company and the Ashdod Port Company for the commencement of operations of the new terminals.

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1 The writer wishes to thank Moshe Cohen of the Ports and Shipping Authority who helped in processing and organizing the data from the Authority's Annual Statistical Abstract and provided additional data that does not appear there.

2 This chapter will not examine Israeli shipping or the number of Israeli seamen since there have not been any major developments recently. This situation is not encouraging and we would draw the reader's attention to the chapter on Israeli shipping in this Strategic Evaluation published by the Haifa Center for Maritime Policy and Strategy of Haifa University. The chapter calls on decision makers and the Israeli government to urgently discuss the future of Israeli shipping and the number of Israeli seamen.

## Port activity in 2017

The number of ships that visited Israel's commercial ports (Haifa, Ashdod, Eilat and Israel Shipyards) was 6383 in 2017, which represents a 2.1 percent decrease relative to 2016.

The maritime departments of the Haifa and Ashdod ports dealt with all aspects of the service provided to these ships (routing, towing, mooring, anchoring, safety within the boundary of the ports and port control).

Negotiations are currently taking place between the unions in the maritime departments of the Haifa and Ashdod port companies, the Israel Ports Company (IPC) and the Ministry of Transportation with regard to transferring the maritime departments from the port companies to the IPC. This is a complex and controversial issue which involves the format of the maritime departments within the IPC.

There are a number of possibilities:

1. The maritime departments will become part of the IPC (The port landlords).
2. The maritime departments will become subsidiaries of the IPC.
3. The status quo will be maintained, such that the maritime departments will remain within the Haifa and Ashdod port companies and will provide maritime services to all companies operating in the port.
4. A different configuration (there are a number of possibilities, such as privatizing the maritime departments or parts of them).

Whatever decision is made, the existing maritime departments will serve as a professional infrastructure for the provision of maritime services to the ships being handled by all of the companies in each port, including the new terminals (the Hamifratz port and the Hadarom port). In discussions among stakeholders, the possibility is periodically discussed that the IPC will establish maritime departments that will provide maritime services to the new companies (the Hamifratz port that will be operated by SIPG, a Chinese company, and the Hadarom port which will be operated by the TIL company). This solution is not economically feasible and it is possible that these discussions are simply a tactic.

One of the challenges to the maritime departments in both ports is the maneuvering of large ships on entering and exiting the ports' piers, and particularly the giant container ships, which account for a growing share of global traffic. The upward trend in the orders of these giant container ships requires that the world's ports make

modifications to allow these ships to maneuver and of course to enable them to load and unload.

In parallel to the decision regarding the structure of the maritime departments, a decision is needed as to the fate of the Haifa and Ashdod administrations which are currently part of the ASP.

### **Reminder**

The Haifa and Ashdod port administrations were created in 2007 as part of an agreement between the Ministry of Transportation (ASP) and the IPC. It was agreed that the port administrations would constitute the administrative infrastructure that would allow the IPC to operate in all of the shared domains as a “landlord”, including security, maritime department services, environmental protection, etc. It was also decided that the port administrations would be transferred in the future from the ASP to the IPC once it was transformed into the ports’ landlord. One of the possibilities is to execute the agreement between the IPC and the ASP as written, namely to transfer the port authorities to the IPC and that they will report to the maritime departments (to be transferred to the IPC), as will the appropriate framework in the IPC that will serve as its executive arm in the ports in all the shared domains (maritime departments, security, environmental protection, etc.).

In most ports around the world, the landlord system is used to operate the port. The municipality is the landlord of the port and it is responsible for issues that are common to all the companies (development, transportation, marketing, security, maritime services and other activities). The reform of the ports in 2005 did not deal with all aspects of this situation. According to the reform, it was decided that the IPC would be the landlord with respect to the land and the development of the ports. It should be mentioned that the IPC serves as landlord for the existing ports in many realms (port development, land, infrastructure, etc.). In order for the IPC to become a full landlord of the ports, a number of steps are necessary, and in particular transferring the maritime departments from the port companies to the IPC; making the IPC fully responsible for security in the ports; and of course updating the Shipping and Ports Authority Law, 5774–2014, accordingly.

The Haifa and Ashdod port administrations have operating in this format since 2007 as a temporary solution until the necessary modifications are made. The original intention was to operate the authorities in this format only temporarily until they are transferred to the IPC and the IPC’s establishment as a landlord with respect to all

shared domains, as well as the creation of an appropriate organizational framework for what is known worldwide as a “port authority”.

It is recommended that a decision be made on this issue in parallel to the decision that is currently under discussion regarding the maritime departments.

## **Containers**

There is a long-term upward trend in global container traffic of about 4-6 percent annually. The trend in Israel is similar.

In 2017, total container traffic was 2.9 million TEU's in the Haifa and Ashdod ports, which represents an increase of 5.8 percent relative to 2016. Since 2000, there has been an annual increase of 4.6 percent in container traffic. Container traffic in units (number of containers) totaled 1.843 million this year, which represents an increase of 4.8 percent relative to 2016.

According to the Annual Statistical Abstract of the ASP for 2018, the data for the first three quarters show that this trend has continued. In other words, container traffic continued to grow by 4–6 percent in annual terms.

In the Ashdod port, container traffic totaled 1.525 million TEUs, which represents an increase of 5.7 percent relative to 2016.

In the Haifa port, container traffic totaled 1.343 million TEUs, which represents an increase of 5.9 percent relative to 2016.

The share of the Ashdod port in total container traffic is 53.2 percent and that of the Haifa port is 46.8 percent. This is in contrast to the past when the Haifa port accounted for about two-thirds of container traffic and the Ashdod port for only one-third. The Ashdod Port Company succeeded in changing this ratio in its favor since the Eitan (Hayovel) port went into operation in 2006. This ratio is a function of various factors, including the competition between the Haifa and Ashdod port companies.

Competition within each port and between the ports (Haifa and Ashdod) will intensify once the Hamifratz and Hadarom terminals go into operation in 2021.

During the first three quarters of 2018, there were indications of a change in favor of the Haifa port, with its share increasing to 50.7 percent relative to Ashdod's share of 49.3 percent.

## Transshipment

The total containers that were transshipped in Israel's ports during 2017 was 154,645 TEU's. Of that the Haifa port accounted for 145,134 (94 percent) and the Ashdod port accounted for 9512 (6 percent).

In the near future, with the opening of the new terminals, the shipping companies will consider transforming one or both of the terminals into a regional hub, which will have an effect on the regional competition between the ports in the Eastern Mediterranean. The ability of the new terminals to handle giant container ships together with their container storage capacity can transform them into a regional hub for the Eastern Mediterranean.

During the first three quarters of 2018, this trend remained unchanged. Transshipment was divided between the two ports as in 2017.

The major question of whether the large shipping companies will locate their regional hub for the Eastern and Central Mediterranean and the Black Sea in one of Israel's ports will remain open until the new terminals begin operations. The answer to this question will have a number of effects (efficiency, reliability, level of service, productivity, costs, the regional situation, etc.).

This year, there was a growing trend for the Haifa and Ashdod port companies to direct large ships (around 14,000 TEUs) to their deep piers (the Carmel pier in the Haifa port and Pier 23 in the Ashdod port). The shipping companies that operate these large ships are welcoming the efforts being made in the ports to improve routing, mooring and maneuvering ability in the aforementioned piers. The efforts of the port companies are meant to improve their ability to compete in providing direct call services to the large container ships (14,000 TEUs).

The new terminals that are being built in the Haifa and Ashdod ports are able to handle the large ships. The depth of the water at these terminals is meant to be 17.3 meters, the turning radius will be about 600 meters and the length of the piers will be 750-800 meters.

The "threat" of these terminals is meant to shift a not insignificant share of the container traffic away from the Haifa and Ashdod port companies. The administrations of these port companies are concerned, and rightly so, and each of them is strategizing as the day approaches when the new terminals will go into operation.

It can be assumed that once the new terminals go into operation, the container traffic of the Ashdod and Haifa port companies will be reduced, in view of the better conditions at the new terminals (depth, size of ships, etc.) and the fact that the terminals are closely connected to the shipping companies. It can also be assumed that the level of service / reliability / efficiency will be superior to that of the government port companies. This is essentially the main challenge facing the Ashdod and Haifa port companies.

The company that most successfully reorganizes in preparation for the new era of competition will be the one that survives and flourishes.

### **General cargo**

In 2017, 3.9 million tons of commodities passed through the commercial ports, which represents a decline of 9.4 percent relative to 2016. It is difficult to draw any conclusions with respect to the trend in general cargo over the years. This is illustrated by the fact that in 2000, 3.8 million tons of general cargo passed through Israel's ports, which is similar to the volume in 2017.

In 2017, general cargo was divided between the ports as follows:

Haifa Port Company – 615 thousand tons, an increase of 6.9 percent relative to 2016.

Israel Shipyards Port Company – 1183 thousand tons, a decline of 19 percent relative to 2016.

Ashdod Port Company – 1877 thousand tons, a decline of 6.4 percent relative to 2016.

Eilat Port Company – 182 thousand tons, a decline of 17.4 percent relative to 2016.

General cargo can be characterized as follows:

- The entry of the Israel Shipyards Port Company (a private port) into the sector led to a significant quantity of cargo being shifted to it from the Haifa and Ashdod ports.<sup>3</sup>
- There is genuine competition between Israel's Mediterranean ports, such that general cargo has been shifted to the Israeli Shipyards Port from the Haifa and Ashdod port companies.

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3 See the chapter on the national element of operating the Israel Shipyards Port in this document.

- The administrations of the port companies are devoting attention to general cargo and in particular the improvement of productivity and environmental protection.
- Despite the trend toward containerizations of many types of cargo (starting from the standardized stacking of general cargo and ending with container transport), general cargo will continue to “demand” efficient solutions for loading/unloading, storage, distribution, etc.

According to the strategic plans of the Ashdod and Haifa port companies, there is an intention to develop this domain as a major component in port revenues. The activity in the Israel Shipyards port proves that if activity is organized appropriately general cargo can be profitable and can constitute a major component in the mix of cargo dealt with by the port companies.

During the first three quarters of 2018, there was an increase of 2 percent in the quantity of general cargo relative to the first three quarters of 2017.

### **Automated facilities**

The exports of Israel Chemicals Limited (phosphates and potash) from the Ashdod port totaled 1.444 million tons, a decline of 20.1 percent relative to 2016. The exports of Israel Chemicals Limited (phosphates and potash) from the Eilat port totaled 1.988 million tons. The import of cement through the Israel Shipyards port was 942 thousand tons and was handled using an automated facility and modern storage and distribution capabilities. Import of cement through the Eilat port – 997 thousand tons. Import of seeds by way of the Dagon facility in the Haifa port – 3.281 million tons. Import of raw fuel through the SPL connection in the Haifa port – 3.300 million tons. Export of fuel by Petroleum and Energy Infrastructures Ltd. through the Haifa port – 742 thousand tons. Export of chemicals through the Haifa port – 417 thousand tons.

Bulk cargo:

- The Haifa Port Company – 2.041 million tons, an increase of 32 percent relative to 2016.
- The Ashdod Port Company – 3.385 million tons, a decline of 1 percent relative to 2016.
- The Israel Shipyards Company – 803 thousand tons, a decline of 22 percent relative to 2016.



Main characteristics:

1. Part of the cargo moving through the automated facilities in the ports consists of captive cargo and the volume of their activity is affected by competition in the international markets. For example: the export of phosphates and potash from the Ashdod and Eilat ports or the export of fuel products from the Haifa port.
2. There is a certain level of competition in cement. The Ashdod port and the new project to import cement through the Israel Shipyards port is challenging the Israeli cement monopoly.
3. The import of bulk cargo is important in the use of facilities that minimize air pollution (bulk, pneumatic buckets, etc.).

### **Import of vehicles**

Israel does not manufacture any vehicles and therefore all new vehicles must pass through the seaports.

The total number of vehicles imported into Israel in 2017 was 311,344, a decline of 15.2 percent relative to 2016.

The Haifa Port Company – 55,932 vehicles, a decline of 24.8 percent relative to 2016. This constitutes 18 percent of Israel's total vehicle imports.

The Ashdod Port Company – 161,184 vehicles, a decline of 0.6 percent relative to 2016. This constitutes about 52 percent of Israel's total vehicle imports.

The Eilat Port Company – 94,228 vehicles, a decline of 23 percent relative to 2016. This constitutes about 30 percent of Israel's total vehicle imports.

There is still a shortage of storage space for imported vehicles. Again this year, use was made of all available space in the ports for the storage of vehicles, to the point that it interfered with the activity of the operational piers that are intended for the loading and unloading of other types of cargo.

During the first three quarters of 2018, there was an increase of 1.3 percent relative to the same period in 2017.

### **Passenger traffic**

In 2017, Israel's ports were not visited by a large number of cruise ships, despite the variety of historical sites in Israel and the increase in incoming tourism. Total

passenger traffic through Israel's ports in 2017 was 176,346, a decline of 7 percent relative to 2016.

The Haifa port – 140,054 passengers which constitutes 79.5 percent of the total. This represents a decline of 11.6 percent relative to 2016 and constitutes 79.4 percent of total passenger traffic to Israel.

The Ashdod port – 26,757 passengers, an increase of 24.3 percent relative to 2016. This represents 15 percent of the total passenger traffic to Israel.

The Eilat port – 9536 passengers, a decrease of 1.5 percent relative to 2016. This represents 5.4 percent of total passenger traffic to Israel.

There is competition among the port companies to attract cruise ships to the Haifa and Ashdod ports. The cruise ship sector could provide a significant amount of revenue for the port companies in an era of increased competition for container traffic.

The factors that affect this sector:

- The political situation (the rounds of fighting in the North and the South).
- The overall tourism situation in Israel and worldwide.
- The level of service provided to cruise ships.
- The attractiveness of the holy sites (Nazareth, Jerusalem, the Dead Sea, etc.).

## **The status of the projects<sup>4</sup>**

### **The Hamifratz and Hadarom ports**

A Dutch company called Haskoning won the international tender issued by the IPC for the strategic planning of Israel's ports. It will be responsible for preparing a master plan for Israel's seaports. The target years for the characterization of Israel's ports is 2048 (Israel's centennial year). The company will analyze the needs, the alternatives and other important factors and will present a possible scenario for the development of new ports/terminals.

In addition, the IPC issued a request to the public to express its opinions and ideas with regard to a masterplan for Israel's seaports in the country's centennial year (2048).

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<sup>4</sup> The writer would like to thank Noa Oren, the head of the New Port Development Administration within the IPC for assistance in gathering the data on these topics.

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The IPC did wisely by consulting with the Haskoning Company from Holland in order to decide how the map of Israel's future ports would look. The construction of a new port is not a simple matter and will be a lengthy process (15-20 years from the conceptual stage until the port/terminal begins operations) and therefore it is important to examine needs and capabilities at the earliest stage possible.

It is recommended that use be made of the local knowledge that has accumulated in Israel among the planners / engineers / operators of the new and existing ports in the planning of the future ports.

### **Status of the Hamifratz Port**

The construction of the Hamifratz Port was begun in 2005 by Ashtrom-Shafir, which is the main contractor. It is expected to go into operation in 2021—in about 3 years. The expected cost of construction is about NIS 4 billion which will come from the IPC's budget. The construction is being carried out under the responsibility of the IPC, which is also responsible for choosing the operator. SIPG, a Chinese company (a subsidiary of the Shanghai Port), won the international tender issued by the IPC.

There will be one pier in the port/terminal of 800 meters length for container activity and a secondary pier of about 720 meters in length. The planned depth of the water will be 17.3 meters.

“The construction is proceeding at a good pace. The port is being created between the secondary wave barriers and the walls of the pier, which are composed of thousands of tenons. Sea sand is being constantly injected by means of advanced digger ships. Along the line of the pier, over one thousand concrete piles have been drilled to a maximum depth of about 45 meters. At the same time, the construction of the massive sea wall in front of the piers is continuing. Similarly, connecting walls are being poured and finally the crane walls are being built on which will be placed the giant cranes that will be purchased by SIPG in order to operate the pier for containers. On the secondary wave barrier in the area that connects to the strip of caissons—giant concrete structures that were sunk into the water—work has begun building the “perimeter wall” from cast concrete, an additional weight added to the wave barrier that will protect the port against heavy seas. A high voltage electrical substation is being built to supply electricity to the port. The work to prepare and secure the large territory of the port is continuing at full speed. The lengthening of the main wave barrier has been completed along an 882 meter route. Currently, a final upper reinforcement layer is being laid which is composed of thousands of concrete blocks, each weighing up to 30 tons. This huge structure, which rises from the seabed to a height of 25 meters will protect the port from heavy seas.”

SIPG is working energetically at the moment and will continue to formulate the strategy for the terminal, including the port's operating configuration. Yoav Zuckerman, the company's representative in Israel, explained that the company is in the advanced stages of characterization, acquisition and installation of equipment and is getting organized for the start of operations. However, at this stage, he could not provide details in view of the competition that is expected between the Hamifratz terminal and the Port of Haifa.

Given the unavailability of details from SIPG, we are unable to describe the components that are planned for the Hamifratz terminal.

### **Status of the Hadarom port**

The construction of the Hadarom port was begun in 2014 by PMEC, a Chinese company which is the main contractor. It is expected to begin operations in 2021. The cost of construction is expected to be NIS 3.3 billion which will come from the IPC budget. IPC is responsible for the construction, as well as the choice of operator. The operator of the terminal is TIL (a subsidiary of the MSC shipping company) which won the international tender issued by the IPC.

The port/terminal will have a main pier for containers that is about 800 meters long and a secondary pier of about 500 meters. The water depth is expected to be 17.3 meters.

“Sea sand is being injected into the area of the future port which is delineated by a wave barrier from the North and by the pier wall from the South. The work is being carried out by advanced digger ships until the fill is completed.

In order to create the main pier so that it can bear the incredible weight of the cranes and cargo which the port will be handling, hundreds of concrete piles are being drilled to a maximum depth of 36 meters.

Along the line of the main pier, the construction of the rear pier wall is being completed. It is being created by the penetration of steel tenons into the seabed using powerful penetration hammers. Between the tenon walls, hundreds of steel anchorage rods are being laid. At the same time, the construction of the massive sea wall in front of the piers is continuing, along their entire length.

In the next stage, the connecting walls will be poured, followed by the crane walls which will bear the weight of the huge cranes. In the rear of the port, a high-voltage substation is being built which will provide electricity to the new port. The preparation and securing of the large port territory is continuing.

The work in the open sea is challenging due to the forces of nature. A perimeter wall—a massive concrete structure—is being built along the 1500-meter secondary wave barrier. It will serve as additional weight for the wave barrier and will strengthen the defense line of the port against heavy seas.

Work is continuing on the reinforcement of the wave barrier walls.

Western pier – The foundation of this unique pier is composed of a structure of 600 steel pipes.

Alongside them, there is a strip of huge concrete structures called caissons,<sup>5</sup> which were placed on the sea bed.

In parallel, the lengthening of the main 600-meter wave barrier is continuing.

The massive wave barrier structure that rises like a wall from the seabed to a height of 32 meters will protect the port from heavy seas.

The pouring of a perimeter wall is being carried out on the wave barrier, as an additional weight element and which will also serve as a roadway.

A giant platform is inserting gravel columns into the seabed in order to reinforce it along the length of the wave barrier.]

## **Preparations by the Haifa and Ashdod port companies for increased competition from the Hamifratz and Hadarom terminals**

### **General**

The operation of the new terminals in the Port of Haifa—the Hamifratz terminal—and in the Port of Ashdod—the Hadarom terminal—which will begin in 2021, is a major concern to the Haifa and Ashdod port companies (and rightly so). A significant share of the containers that are currently handled by the port companies will shift to the new terminals. It can be assumed that when the new ports are fully operational, 50 to 70 percent of the containers will be handled by the new ports.

The advantages of the new ports:

1. A deep-water pier (17.3 meters) about 850 meters in length with a turning radius of 600 meters. This will allow the entry of large containers ships (about 400 meters in length which is the size of the giant container ships currently being built).

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<sup>5</sup> Caissons: empty concrete structures built on land, which are floated to the marine construction site, then filled with sand and sunk in order to create marine infrastructures.

2. Modern up-to-date equipment and systems. We do not have details of the type of systems since the representative of SIPG (in the Hamifratz port) and of TIL (in the Hadarom port) are not prepared to provide any information at this stage. It can be assumed that the professional expertise of the new operators and their experience in operating other terminals around the world will come into play at the Hamifratz and Hadarom terminals.
3. The new terminals will have a business/commercial connection with large shipping companies that are involved in the transport of containers worldwide. It is likely that these terminals will be preferred by these shipping companies.
4. The new operators will have lower costs than those of the existing port companies (manpower, automation, computer systems, etc.). The trend toward manpower savings can be relevant in almost every element of a container terminal's activity (operation, maintenance, information systems, etc.).
5. It is planned that the terminals will include the construction of railway tracks and a railway terminal in each of the container terminals.
6. There is a growing global trend toward building giant container ships with a capacity of 18,000 to 22,000 TEUs or more. Some of these container ships will be able to enter the new terminals.

The Haifa and Ashdod port companies have been working energetically in recent months on reorganizing and making preparations for the new era, which will begin when the Hamifratz and Hadarom terminals begin operations. This will increase competition within each port, between the ports and perhaps even between the new terminals and hub ports in the Eastern Mediterranean.

Naturally, some of the decisions by the port companies are confidential and include competitive elements. Therefore, the information in this article is based on various media sources, conferences and the insights of the writer. Many of the issues are in the process of negotiation with the workers and therefore there is more hidden than revealed. The large scale of investments by the port companies have still not been approved by their boards; however, it can be assumed that the managements of the port companies will do whatever they can to prepare for the approaching era of competition and to put the ports (the Haifa and Ashdod port companies) in a better position to compete for containers and cargo arriving in their areas.

The main topics being discussed by the port companies, the IPC and the Ministry of Transportation are as follows:

1. The deepening of the existing piers of the Haifa and Ashdod port companies and reorganization in order to receive large container ships of around 18,000 TEUs.
2. Upgrading of existing container capabilities (retooling of piers, larger cranes and improved services).
3. Manpower – a drastic reduction of manpower is needed in various domains in order to reduce costs (reduction in work stations, work methods, wages, etc.).
4. General cargo – Expanding the capability to handle general cargo (piers, storage, work methods, logistic center, etc.).
5. Development of other cargo (seeds, passengers, vehicles, etc.).
6. Additional uses, whether port-related or otherwise.
7. Recruitment of a strategic investor – examination of feasibility, advantages and disadvantages.
8. Transfer of the maritime departments to the IPC and the completion of creating landlord status for the Haifa, Ashdod and Eilat ports.

### **The Haifa Port Company**

During 2018, the Haifa Port Company was energetically working to formulate a strategic plan that would map out the company's future path. As mentioned, it was not possible to obtain confirmation from the port management of the information appearing in this document. Following are the highlights as I understand them, based on statements by senior port executives at conferences and in the local media.

As mentioned, what is written in this section is according to my understanding and does not obligate the Haifa Port Company.

The general direction of the port's management and the Board of Directors is to transform the Port of Haifa into a small and effective port by improving its ability to compete, its operational flexibility, its ability to respond to customers, the availability of piers and its level of service.

1. The east container pier will not be deepened at this stage. The Haifa Port Company will focus on attracting container ships of only 14,000 TEUs to the Carmel pier where cranes will be added and heightened and the crane arms will be widened. The Haifa Port Company has arrived at the conclusion that deepening the eastern pier at this stage will not contribute significantly to its ability to compete with the Hamifratz port. In the future, it is possible that the

eastern Carmel pier (which is not currently in use) will be upgraded so as to attract large container ships of 18,000 TEUs.

2. The work pier (Kishon Mizrach) of the Hamifratz port will be transferred to the Haifa Port Company at the conclusion of the construction of the Hamifratz port and will become a pier for general cargo and seeds (the target: 6 arm cranes at Kishon Maarav and 3 Gottwald arm cranes at Kishon Mizrach).
3. Agreements with the workers to increase efficiency (voluntary retirement, reduction in number of work stations, etc.). There are intensive discussions in order to sign an agreement in principle, which will be followed by detailed agreements.
4. Connecting Kishon Maarav and Mizrach by means of an operational bridge that will be built above the port. The flow of operational vehicles on the bridge between Kishon Maarav and Kishon Mizrah will streamline the handling of cargo.
5. The creation of one cargo gate for the Kishon Maarav and Kishon Mizrah piers.
6. The deepening of the Kishon Port and providing operational capability to handle Panamax ships.
7. Upgrading railway capability.
8. Upgrading of capabilities for other types of cargo (seeds, vehicles, iron, etc.).
9. Integration within various projects, such as the Western Sea Front in partnership with the Haifa Municipality, collaboration with gas exploration companies in the Mediterranean, etc.

### **The Ashdod Port Company**

The Ashdod Port Company approved a strategic plan in principle which is meant to improve its competitiveness prior to the completion of the Hadarom terminal, which is planned for 2021. As mentioned, the port management would not confirm the information presented in this document. Following are the highlights of the plan as I understand them, based on statements by the port management at conferences and in the local press.

As mentioned, what is written in this section is according to my understanding and does not obligate the Ashdod Port Company.

1. Deepening of Pier 21 (in the eastern section) to a depth of 17.3. meters in order to enable the loading and unloading of container ships with a capacity of 18,000 TEUs.



2. The aforementioned includes all of the changes required for the deepening including the reinforcement of piers in order to bear the weight of the appropriate cranes, the acquisition of new cranes and the preparation of a container storage area with Rubber Tired Gantry (RTG) cranes.
3. The western section of Pier 21 is designated to handle seeds by means of 2 existing pneumatic buckets, each with a capacity of 600 tons per hour. Another pneumatic bucket with a capacity of 1200 tons per hour will be acquired in the future. Recently the seed conveyor project was approved. It will carry the cargo unloaded by the pneumatic buckets to storage in the rear of the port, which will save the double handling that exists today. The project will be completed in 2020/1.
4. The container storage area beside Pier 7 will become a general cargo storage area with a Rail Mounted Gantry (RMG) which currently exists for containers.
5. Pier 7 will no longer be used as a container pier; Piers 7 and 9 will become general cargo piers. Pier 9 (which in the past was used to unload coal ships) has a depth of about 13 meters which will make it possible to handle large general cargo ships.

### **Transportation of containers by Israel Railways in 2017**

The movement of containers by rail accounted for about 7.4 percent of total container traffic in 2017. The expanded use of the freight trains of Israel Railways for the transport of containers will reduce the truck traffic on Israel's roads and therefore it is recommended that the existing and new companies make maximal use of railway terminals for this purpose.

A third railway track was added to the existing railway terminal at the Port of Haifa, which improved the output of the terminal.

The new railway station in the Ashdod port, which was meant to serve the Hayovel port and Pier 7, is not being used.

As part of the plan for the Hamifratz and Hadarom ports, a railway track will be built to these terminals, which will be completed in 2021 when the ports go into operation.

Following are figures generously provided by Israel Railways:

From the Haifa port: to Ashdod – 56,592 TEUs; to other destinations – 8,741 TEUs.

From the rear terminals in Haifa: to Ashdod – 10,605 TEUs; to other destinations 7,620 TEUs.

From Ashdod port to Haifa – 18,774 TEUs; to other destinations – 11,189 TEUs.  
From the rear terminals in Ashdod to Haifa – 75,739 TEUs; to other destinations – 27,498 TEUs.

### Recommendations

1. Taking on a strategic partner in the existing ports (Haifa/Ashdod): In view of the discussions regarding the Chinese presence in the domain of Israel's infrastructure and the ports' intention to take on a foreign strategic partner, it is recommended that the decision on a potential partner for the ports will take into account elements of national security, in addition to economic and operational considerations. In this context, we would draw the reader's attention to the chapter on the Chinese ports in Israel in this Strategic Evaluation.
2. Encouraging the specialization of the existing ports in areas other than containers, such as general cargo, passengers, etc, since most of the container traffic is expected to shift to the new terminals.



The giant ships ELBA Maersk carries out maneuvers using tugs in the Port of Haifa, Courtesy of the spokesmen of the Port of Haifa



Cars unloaded on the platform at Port of Haifa, Courtesy of the spokesmen of the Port of Haifa