

INTEGRATED LOGISTICS IN THE DEVELOPMENT OF THE CONSTANTA PORT

Florin Iordanoaia¹

Abstract

In the last 32 years, the port of Constanta has evolved in leaps and bounds, without a coherent development strategy, being permanently subject to political influence, which did not have clear development and performance objectives, in the medium term or long. The port operators have developed their own development and investment strategies, depending on their objectives in different terms, usually in the short and medium term.

In this paper, an analysis of the current situation of the Port of Constanta, of the strategies and projects that are underway or to be launched in the next period is carried out. Apart from these, other management strategies are analyzed and presented, based on the logistics integrated in the port operation activity.

Keywords: strategy, management, logistics, port.

JEL classification: M 21, O 22, R 11.

1. Introduction

The development of the port of Constanta is very important in the context of economic integration and on multiple levels, of Romania in the European Union, in the field of transport. For this, there must be a medium and long-term sectoral development strategic plan. Following the development strategies of the Ministry of Transport, the National Company "Maritime Ports Administration" SpA Constanta, of the big port operators such as: "Constanta South Container Terminal" Company, "Oil Terminal" SpA Company Constanta, "Socep" SpA Company Constanta, etc., we found that many of these have not developed long-term development strategies, for more than 5 years, they only have a few short-term strategies developed, from 2-5 years, until the year 2023-2024. The Ministry of Transport developed a "General Master Plan for Transport 2007-2013", MT (2008), continued with the second General Master Plan for Transport of Romania, until the year 2030, MT (2020), which constitutes a strategic document of basis for any other "subsequent programming or planning document in the transport sector". The general objective of the first General Transport Master Plan was to "constitute a strategic and coherent basis for programming investments in the medium-term transport field". The Master Plan, in theory, aims to "adjust and develop the infrastructure, improve transport services, considering: the expansion of transport networks, the adjustment and modernization of the existing network, the estimation of the role of infrastructure in the development of the economy, the increase of the efficiency of the transport system".

The General Transport Master Plan served as the basis for the negotiation of financial assistance from the European Union in the period 2007-2013 and 2014-2020. The General Transport Master Plan has the character of a strategic framework for the field of transport and represents a basis for all subsequent planning activities: the revision of the "Sectoral Operational Program for Transport Infrastructure", and the planning of projects financed by the various programs. The document focused in particular on the priorities established on the Trans-European Transport Network and had as its first goal the promotion of the sustainable development of the transport infrastructure, based on the balance between economic, social and environmental requirements. Some of the objectives of the Ministry of Transport are also found in the development strategy of National Company "Maritime Ports Administration" Constanta, which are formulated to be able to cope with the increase in traffic, the requirements arising from Romania's accession to the European Union and the consolidation of the position of the Port of Constanta on the Pan-European Transport Corridors. National Company "Maritime Ports Administration" S.A. Constanta has promoted, both through the 2007-2013 National Development Program and through the Transport Sectoral Operational Program, a series of infrastructure development projects of the Port of Constanta. The projects promoted for the period 2007-2013 were the following: the construction of a systematized railway complex, the construction of

¹ PhD, Association "Education and Staff Training", Mangalia, Romania, floriniordanoaia@yahoo.com.

a road bridge at km 0+540 of the Danube-Black Sea Canal and works related to the road infrastructure and access to the port, the completion of the offshore pier, the construction of a bridge over the connecting channel in the river-sea area, the creation of mooring quays and the completion of the existing ones, as well as the creation of fillings and embankments in the territory of the III S pier on an area of approx. 35 ha, the consolidation and systematization of the areas adjacent to the seaport. These projects have been completed and are presented in table 1. The analysis of the current strategies of the Ministry of Transport and the Maritime Ports Administration proves that these institutions do not have a strategic plan based on the knowledge of the reality of the port, the needs of the national economy and those of the European Union. These documents elaborated by the two institutions are far from reality, from what is happening today in the field of maritime transport, maritime and river ports, inland waters in the European Union. The promoted projects are of small scale and value, they do not solve the main problems of port operators, its do not contribute to stimulating the development of port traffic, of economic agents. Not in any document of these institutions are found the investment needs for the development of the economic agents in the port of Constanta, even if some of them have short- and medium- term development programs, they are not known, they are not evaluated from the point of view of reliability and economic profitability.

Integrated logistics is only mentioned in a series of documents, its role in the realization of multimodal transport is recognized, but apart from the references there is no document that explains what this means from a strategic point of view, where the "key" points of logistics and how the logistics problems specific to a maritime and river port must be solved. No programmatic document refers to the workforce required for the normal development of activities and especially for their development. Currently, many engineers, specialists, foremen and workers, with experience at port operating companies, have gone and work abroad, at port operators and shipyards in the European Union and outside Europe. This fact will attract a staffing crisis, with shipyards being the first to face a staffing crisis already. Also, the regional geopolitical context implies certain changes in the conduct of business in the port, even a major change in orientation, from large imports to exports, which leads to other problems for operators and the administration. The main objectives of this work are the following:

- Analysis and evaluation of the situation of the programs and strategies of the port administration and the main port operators.

- Analysis of some methods of implementing the objectives of Integrated Logistics, for the development of business in the port of Constanta.

- Establishing port development strategies, in the current geopolitical context.

- Increasing the competitiveness of the port of Constanta in the context of the development of competing ports in the Black Sea, the Aegean Sea and the Mediterranean Sea, of the large investments made in them, in order to attract ship-owners and charterers to use the operating capacities of the port of Constanta.

- Elaboration of a multi-level strategic development plan for the port of Constanta.

2. The research methodology used

To carry out this work, we studied the documents developed by the Ministry of Transport, by National Company "Maritime Ports Administration" Constanta, but also those of large commercial companies, the main operators in the port of Constanta. We systematized the information and centralized it, to meet the requirements of this study. The research methodology consisted in the systematic, oriented and coherent study, in relation to the principles that are used in a scientific investigation in the field of logistics and managerial strategies. The main research method is that of the "transfer of concepts", but also of the transfer of the authors' personal ideas, which have been elaborated in recent years. The research theme was oriented towards development strategies and integrated logistics (supply, technological, distribution) and reverse logistics, which brings together transport, handling, warehousing, storage, conditioning, packaging, marketing, manufacturing and recycling technologies, with the aim to obtain pertinent information about the development possibilities of the port of Constanta, through a scientific approach, to solve a complex problem regarding the field of maritime, river transport and port operations.

3. The situation of development programs and strategies at the main port operators

In the following, some of the commercial companies operating in the port of Constanta will be presented.

A. National Company “Maritime Ports Administration” SpA Constanta. This company is subordinate to the Ministry of Transport and is the one that manages the assets of the port of Constanta. The programs and strategies of the National Company “Maritime Ports Administration” SpA Constanta, are presented in table 1.

Table 1. The programs and strategies of the Maritime Ports Administration

No	SITUATION OF THE PROJECTS		
	PROGRAMMING PERIOD 2014-2020 (+3)		
	PROJECTS IN PROGRESS	SUBMITTED PROJECTS	PROJECTS IN PREPARATION
1.	POIM financing program (Large Infrastructure Operational Program): 1. Extension to four traffic lanes of the existing road between Gate 10 Bis and Gate 10. 2. Modernization of the electricity distribution infrastructure in the Port of Constanta. 3. Extension of quays of berths 10 and 12 in the Midia Zone, including reinforcements behind quays code SMIS 153124.	0	POIM financing program (Large Infrastructure Operational Program): 1. The extension to 4 lanes of the road between Gate 7 and the junction with the “Danube-Black Sea Canal Road Bridge” objective with the road connecting Gate 9 and Gate 8 to the North area of Constanta Port.
2.	CEF funding program (Mechanism for Interconnecting Europe): 1. 2016: PROTECT “Infrastructure modernization and environmental protection in the Port of Constanta”. 2. 2019: EALING ACTION “European flagship action for cold ironing in ports”.	-	Infrastructure projects in preparation for the Transport Operational Program (POT) 2021 – 2027: 1. Rehabilitation, modernization and expansion of the road infrastructure (roads, passages, including road bridge over the connecting canal) and access to Constanta Port and the Midia area. 2. Dredging works in the Ports of Constanta (Constanta and Midia area) and Mangalia (including the widening of the entrance). 3. Modernization of the electricity distribution infrastructure in Constanta Port - PHASE II. 4. Development of railway capacity in the River - Maritime Sector of Constanta Port - Stage II.
3.	Transnational Danube Strategy Program: 1. DIONYSUS “Integrating Danube Region into Smart & Sustainable Multi-modal & Inter-modal Transport Chains”.	-	-
4.	HORIZON 2020 program: 1. PIONEERS “Portable Innovation Open Network for Efficiency and Emissions Reduction Solutions”.	-	-
5.	Projects from own sources: 1. Revision of the Master Plan of Constanta Port.	-	-
PROGRAMMING PERIOD 2021-2027			
6.	CEF funding program (Mechanism for Interconnecting Europe): 1. 2021: ECOLD “Ensuring the electrical conditions for connecting ships to the wharf in Constanta Port (Cold Ironing regime), in order to interconnect to the TEN-T for the implementation of the EALING project (works)”.	-	-
PROJECTS FINISHED			
7.	1. Extension of the Broad Pier in Constanta Port, extension by 1050 m, POST 2007-2014. 2. Road Bridge at km 0+540 of the Danube-Black Sea Canal, POST 2007-2014. 3. Development of Railway Capacity in the River - Maritime Area of Constanta Port, POST 2007-2014.	-	-

No	SITUATION OF THE PROJECTS		
	PROGRAMMING PERIOD 2014-2020 (+3)		
	PROJECTS IN PROGRESS	SUBMITTED PROJECTS	PROJECTS IN PREPARATION
	4. Southward extension of the berth in Constanta Port, POST 2007-2014. 5. Danube Ports Network -DAPhNE- Danube Strategy Transnational Program 2014-2020. 6. CIVITAS PORTIS PORT -CITIES: Innovation for sustainability. 7. Implementation of a specialized berth in an area with great depths (Berth 80) SMIS Code 2014+: 121588. 8. Modernization of the port infrastructure by ensuring the increase of the depths of channels and basins and the safety of navigation in the Port of Constanta.		

Source: MPA (2022).

Funding of the projects carried out and proposed by National Company “Maritime Ports Administration” Constanta, are presented in table 2.

Table 2. The value of the financing of ongoing and proposed projects

No	PROJECTS	VALUE (mil. Euro)
	POIM financing program (Large Infrastructure Operational Program):	-
1.	Extension to four traffic lanes of the existing road between Gate 10 Bis and Gate 10.	12
2.	Modernization of the electricity distribution infrastructure in the Port of Constanta.	22,7
	CEF funding program (Mechanism for Interconnecting Europe):	-
3.	2016: PROTECT “Infrastructure modernization and environmental protection in Constanta Port”.	12,7
	POIM financing program (Large Infrastructure Operational Program):	
4.	The extension to 4 lanes of the road between Gate 7 and the junction with the “Danube-Black Sea Canal Road Bridge” objective with the road connecting Gate 9 and Gate 8 to the North area of Constanta Port.	30,7
	POIM financing program (Large Infrastructure Operational Program):	
5.	Extension of quays of berths 10 and 12 in Midia Zone, including reinforcements behind quays code SMIS 153124.	16,6
	Infrastructure projects being prepared for the Transport Operational Program (POT) 2021 – 2027:	-
6.	Rehabilitation, modernization and expansion of the road infrastructure (roads, passages, including road bridge over the connecting canal) and access to Constanta Port and the Midia area.	100
7.	Dredging works in the Ports of Constanta (Constanta area and Midia area) and Mangalia (including the widening of the entrance).	120
8.	Modernization of the electricity distribution infrastructure in Constanta Port, STAGE II.	46
9.	Development of railway capacity in the River-Maritime Section of Constanta Port, Stage II.	10
10.	Modernization of the water and sewage infrastructure stage I.	
11.	Modernization of the water and sewage infrastructure stage II.	24
12.	Pier III-IVS is to be designed according to the revision of the Master Plan.	19
13.	Construction of quays in the Constanta-Midia Port area, including fillings behind the mooring constructions and systematization of the territory.	500
14.	Other projects identified after the completion of the Master Plan review.	75
		-
	CEF funding program (Mechanism for Interconnecting Europe):	
15.	2021: ECOLD “Ensuring the electrical conditions for connecting ships to the wharf in Constanta Port (Cold Ironing regime) in order to interconnect to the TEN-T for the implementation of the EALING project.	18,8
16.	Jetties on the northern side of the artificial island to serve a future industrial platform.	109,1
17.	Construction of the quay between Dana no. 8 quays and a berth for the terminal and systematization of the territory - Midia area (technical vessel basin) (works).	7,53

Source: MPA (2022).

B. The Commercial Company “Constanta South Container Terminal” Ltd. This is the largest container operator in Romania. Following the projects and development strategies of this commercial company, we found that it concluded a financing contract with the Ministry of Transport, for the financing of the project “Modernization and development of the capacity of the port of Constanta - development of the port infrastructure in the development area A, MOL II-S Port

Constanta South by expanding the port platform facilitating multimodal transport”. The project is co-financed from the European Regional Development Fund through the “Large Infrastructure Operational Program 2014-2020”, CSCT (2021).

The objectives established within the project are the following:

1. The development of the port of Constanta, ensuring the increase of storage and handling capacities of “RORO” type goods (containers).

2. Ensuring the necessary infrastructure in the port of Constanta for the development of multimodal transport.

3. Modernization of the Constanta port in order to increase the volume of transported goods. Through the works that will be carried out through this project, it is estimated that the following results will be obtained:

- 16 hectares of port platforms will be developed.
- Development of water and electricity supply networks, for the supply of ships, for the operation of equipment and other facilities located on the port platform.
- Increasing the annual volume of goods to approximately 1,700,000 tons/year.
- The volume of containerized goods to reach 969,054 TEU.
- Reduction of CO2 emissions of at least 177,000 equivalent tons per year in 2030 and at least 240,000 equivalent tons per year in 2049.

The total value of the project is 347,692,690.56 lei, of which the total eligible value, financed by the Large Infrastructure Operational Program 2014-2020, is 221,283,406.21 lei, (i.e. 85% of the total approved eligible value, 184,329,077.38 lei is provided from the European Regional Development Fund, 13% in the amount of 32,528,660.71 lei will be financed from the State Budget and 2% in the amount of 4,425,668.12 lei).

C. The Commercial Company “Oil Terminal” SpA Constanta. This commercial company specialized in the operation of petroleum and chemical products have an investment plan, which is oriented towards the modernization of installations and operating equipment, Oil (2022). From the reports of the company's management it follows that:

- Investments were made to equip with computer-aided electronic command and control equipment.
- High-precision flow-meters for the correct management of transported petroleum products, radar telemeters and double-sealing systems for tanks were purchased.
- Machines, laboratory equipment corresponding to European standards were purchased.
- The computer network was expanded within the operational and functional services.
- Two gas thermal power plants were installed, which ensure the energy independence of two of the company's warehouses.

The investment plan for the next period includes the following:

- Installation of a gas thermal power plant at the third warehouse.
- The passage of the underground pipeline network, through the above-ground laying, on several stages.
- Replacement of old pumps, used to transport products.

But the company does not use the financing programs from European funds and from the state budget. In the last 20 years, it only used funds from the “Phare” Program in 2008 and the POSDRU Program in 2012.

D. The Commercial Company “Socep” SpA Constanta. This trading company is a general cargo and container operator. The company completed a series of investments at the container terminal, which was modernized, in 2021 and is working on completing the construction of a grain terminal in 2023. Apart from these large investments, the company has an investment plan and modernization of port operation equipment and installations, Socep (2022).

E. The Commercial Company “Umex” SpA Constanta. This is a trading company specialized in the operation of grains, fertilizers, general packaged and bulk goods, metallurgical products and oversized goods, Umex (2022). The company has made a series of large investments, such as:

- Terminal for fertilizers (chemical substances), which started in 2021, with completion by the end of 2022.

- Terminal for the operation of cereals, started this year, with completion in 2023.

Apart from these major investments, the company made investments for the modernization of equipment and operating installations.

F. “Ameropa” Group. This is a Swiss group that owns two main port operators in the port of Constanta. These are “Chimpex” and “Ameropa Grains”. The “Chimpex” Trading Company is one of the most dynamic port operators, but also the main port operator for grain and bulk or packaged solid chemicals, Chimpex (2021). “Ameropa Grains” Trading Company is one of the largest collectors and exporters of grains and oilseeds and one of the largest distributors of fertilizers, seeds and chemicals for plant protection for agriculture in Romania, Ameropa (2022). Analyzing the development programs and strategies of the Group in general and of the two port operators, the following development strategies resulted:

- Digital transformation of training and testing (2021-2022), by developing an internal online platform, for accessing all procedures, processes, learning and testing materials, and all offices will be equipped with high-performance computers, to have access to “Share Point” and “Internal News”, within the Group.

- Reducing dust pollution by 1%, by reviewing and renewing all pollution procedures.

- Purchasing new equipment to reduce CO2 emissions, by continuously reducing the fuel consumption of this equipment.

G. The Commercial Company “Frial” SpA Constanta. This is a trading company specialized in the operation of grains, scraps, pulp, scrap metal, liquid urea, vegetable oil, fatty acid methyl esters (FAME), etc. It created a bio warehouse for the storage of cereals and oil plants, which was certified in 2022. It has no other major investments planned, considering only the replacement of old equipment and installations with new ones.

H. The Commercial Company “United Shipping Agency” Ltd Constanta. This company is a member of the “Cofco International Romania” Group, headquartered in Bucharest, Cofco (2022). Its activity is the storage and operation of cereals. After the investments made in the previous years, currently, the port operator has no new plans for investments. Analyzing the development strategies of the “Cofco” Group, no investments are foreseen for the operator of the port of Constanta.

I. The Commercial Company “ADM Romania Trading” Ltd Bucharest. This company is a member of the “ADM” Group in the USA and operates a terminal for grains, seeds, fodder, etc., in the port of Constanta. The port operator does not have its own development plan, being directly integrated into the US Group. This company has in mind a series of sustainable development objectives, related to investments with low energy consumption, with the reduction of pollution and for scientific research, ADM (2022).

J. The Commercial Company “Decirom” SpA Constanta. This trading company is a port operator dealing in wood products (timber, plywood, logs), general cargo, rolled products in bars and coils, sheet metal and bundles, scrap metal, foodstuffs, chemicals, building materials, Decirom (2022). From the analysis of the company's documents, no strategies for development resulted, it only considers investments in new equipment, as the old ones are taken out of use.

K. The Commercial Company “Comvex” SpA Constanta. This trading company is the largest terminal specialized in the operation of bulk solid raw materials (iron ore, coal, coke, bauxite) and grain. From the study and analysis of the company's official documents, it follows that it completed the construction of a grain terminal, financed from its own funds and from two bank loans, Comvex (2022). There are no projects for new investments until the repayment of bank loans is completed in 2027.

4. Integrated logistics in port activity

The port represents an administrative, economic, technical and legal entity, Iordanoaia (2007). It connects: maritime and land transport (by rail, road or pipelines); sea and river transport; river and land transport. The logistic functions of a port are the following:

- Reception of maritime and river vessels, loading or unloading goods, in and from ships.

- Storage of goods (depending on their type), receiving the goods in the port and delivering them on board the ships.

- Sorting, packing, labeling and transferring goods to their final destination, from the country or to other countries (as additional services that can be performed in the port).

- State, port and customs control, etc.

A series of economic activities are carried out in the ports, in the field of goods production, shipbuilding and the provision of other port services. The main port services integrated into Logistics are the following:

- Loading or unloading of ships, supervision and electronic control of loading or unloading of containers, their arrangement on the ship or in the terminal, arranging, stacking, mooring or stowing the goods on board the ship.

- Transportation of goods to the berth, for loading the ship or from the berth to the warehouse or directly to the destination. Preparation of goods for transport, sorting, palletizing, packaging, containerization. Storage, storage of goods.

- Supplying ships with food, materials, spare parts, fuels and lubricants.

- Supply of water, electricity and thermal energy for ships and port operators.

- Cleaning and degassing of tanks, warehouses and barns.

- Surveillance of ships, guarding and protection of port facilities, electronic surveillance of port spaces and premises.

The port infrastructure elements that are used in port Logistics operations are the following:

- Specialized port berths and terminals, loading-unloading and handling facilities.

- Buildings, warehouses and storage spaces, access roads, roads, transshipment points, loading-unloading ramps, railways, stations, triages, monitoring and control centers.

Depending on the administrative and logistic organization of a commercial port, the logistic flows are organized and carried out as follows:

- Receiving the goods in the port using the following means of transport: river ships, trucks, freight trains or through pipelines.

- Storage of goods in specially arranged open spaces, warehouses or tanks for petroleum or chemical products. Loading the goods on board the ships, directly from the means of transport that have arrived at the port or based on internal transport, from the stationary or storage places.

- Unloading the ships, directly on the means of transport that will pick them up and transport them to their destination or on the means of transport that will transport them to the waiting or storage places in the port, from the maritime ship, as follows: on the river ship, moored next to the ship maritime; in the railway wagons, brought on the berth next to the ship; on trucks or TIRs; on conveyor belts; through pipelines, at pumping stations or at reservoirs. Loading and transporting goods from the port, directly to the destination.

Considering these Logistics operations, the question arises of its integration into the general activity of a port and port operators. The logistics integrated in the port activity must be designed starting from the following principles, which must be implemented by the Port Administration and which involve the port operators, in order to organize their activities according to these principles. The principles of integrated logistics in the port are as follows:

1. Realization of the modern port infrastructure, according to the methods of modern logistics.

2. The organization and administration of the port, as a unitary whole, by the Administration.

This means that the Port Administration must impose a series of characteristics for the activity of port operators such as:

- A management oriented towards total quality.

- Organization and computerization of activities, to comply with the “Just in time” principle, i.e. to serve customers without the port operator causing delays, which lead to port congestion.

- Imposing and observing the general rules of hygiene and cleanliness, preventing pollution of the marine environment and the port. Taking punitive measures for those who violate port and environmental regulations.

- The computerization of all activities, to reduce the bureaucracy of the Administration.

- A stable and optimized policy regarding port taxes.

The implementation model of Integrated Logistics in the port field is important for: the choice of implementation methods and techniques, the orientation of activities, the management of activities according to the principles of logistics, the reduction of costs, the quantification of the results obtained after a period of time since implementation.

6. Proposals for the development of the port of Constanta

I believe that the development of the port of Constanta, figure 1, must be oriented towards the following strategic directions:

1. Road infrastructure development. This must offer the possibility of fast movement of vehicles (on a 4-lane road system, from the A4 highway to Gate 6, figure 2), provide parking and waiting places for trucks that come to unload or waiting for the loading of the goods, unloaded directly from the ships or from the port warehouses. For the drivers of the means of transport, rest and recovery places must be provided, for serving the meal, in accordance with the provisions of the road legislation.

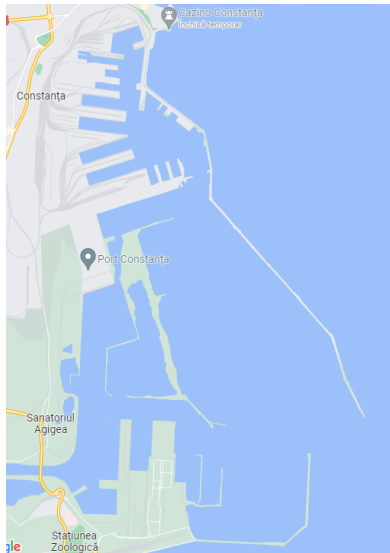


Figure 1. General scheme of Constanta port.
Source: google.map.

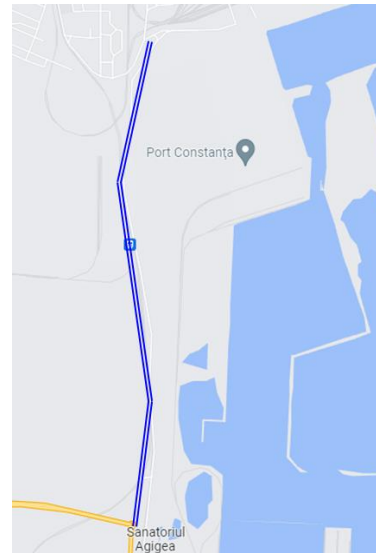


Figure 2. Expressway with 4 lanes.
Source: authors' study (google.map).

2. Construction of additional bridges and passages. These are necessary to avoid crowding at the main entrances and to allow the flow of car traffic.

3. Repair and modernization of roads and access roads, current parking and waiting areas. Considering the fact that the road infrastructure of the port of Constanta is in a precarious state, I consider that this is one of the main directions of action of the Administration. The infrastructure is an important element for the image of the port of Constanta and considering the fact that road transport relations have increased a lot, this requires an adequate response to remedy all the problems and situations faced by road carriers when they arrive at the port of Constanta. In this sense, modern parking lots can be built, with parking and rest places for drivers, even fuel supply stations.

4. Modernization of the railways in the port and outside it. The railways are a big problem for the port of Constanta, due to the obsolescence of the installations, the “dead lines” and the large number of old wagons left stationary in the port. After the outbreak of the conflict in Ukraine, against the background of the demand for transport from this country, the leadership of the Ministry of Transport made the decision to withdraw the old wagons that were stationed in the port, blocking the lines and could no longer be used for transport. Apart from this situation, a number of railway lines are no longer functional, safety, signaling and warning elements are missing, which can lead to accidents.

5. Increasing the depths on the channel and at the berths. Dredging to increase the water depth, on the navigable channel of the port and at the berths that allow the berthing of large ships (oil, mineral tanks). Even though dredging was done and in some berths the depths reached up to 19 meters, with the project reaching a depth of 22 meters. However, dredging is still needed so that more berths allow the access of large ships.

6. Computerization and digitization of all Administration activities. The administration must implement all IT systems and digitize all activities, in order to reduce or even eliminate bureaucracy in the provision of services to customers, port operators or third parties. As part of the national campaign to digitize all the activities of the state administration, it is possible that the port activities will be integrated into a single system for the rapid transmission of information, to eliminate those situations that make it difficult to collaborate with economic agents in the port and in the city,

with customers from the country and from abroad. Carrying out an analysis of the website of the Administration, MPA (2022), I found that it is in an early form, far from the requirements of a modern administration, as we have in other ports in Europe, such as the port of Rotterdam in the Netherlands, RPA (2022). Only forms can be downloaded from the Constanta Port Administration page, which can be filled out and sent by email to the services that deal with the respective services (press information, authorizations, contracts, leases and concessions, port operation and occupational health and safety). Even if there is a certain transparency on the Administration's activities, it is still not possible to discuss "total transparency" or "full digitization". This computerization can be the basis of the transformation of the port of Constanta, from a classic one, into an "intelligent port", in which the command, control and communication processes are integrated into an intelligent system for quick response to requests and quick decision-making, so as shown, for example, in the port of Hamburg in Germany, HPA (2022).

7. Development of the Administration's Marketing service. A modern Marketing service can perform the following functions: to help port operators to search and find new business partners, to use the port's facilities; to follow the situation of other ports in Europe, in order to know the trends and evolutions of goods traffic; to provide accurate forecasts regarding the development of activities, geopolitical and economic opportunities and threats. The Constanta Port Administration has a Marketing service, with an international relations office, but this service is not developed, has no visible activity and does not contribute to increasing the attractiveness of the Constanta port for customers. There is no annual, mid- and long-term Marketing plan that covers all the aspects that the Port Administration can fulfill. The role of this service is insignificant, compared to the Marketing services of other ports in Europe, for example, the port of Thessaloniki in Greece, TPA (2022). The port of Thessaloniki can become a strong competitor of the port of Constanta, the only current impediment is the fact that the depths of the berths of the port only reach up to 11 meters, compared to 22 meters in the port of Constanta. An investment in dredging and the consolidation of the berths would make the port of Thessaloniki a port that could take over a large amount of cargo to the Western Balkans and Central Europe, also considering the fact that there are connections on highways, which Constanta does not have yet, not being completed the highway connecting the port with Arad.

Conclusions

From the point of view of integrated logistics, the development of the port of Constanta must be oriented towards its principles, for the integration of the port in the international supply chains, which contain this port as a nodal point of reference. The area to the south of the port is still in disrepair. Several projects were conceived there, but the initial projects were not realized, by those who took the land under concession, for various reasons. In this sense, the construction project of a gas terminal, several construction projects of some factories and even a steel plant were abandoned. The area is still at the discussion stage and it is expected that the Administration will invest in port, road and railway infrastructure. But the projects of the Administration "do not meet" the wishes and projects of the port operators. Only in the last year, the Administration communicated better with the port operators, recorded their opinions and ideas regarding the development of the port, but still, no major changes appear from the programmatic documents, which would indicate a change in the attention of the Administration. The implementation of projects starting from the principles of integrated logistics would offer great advantages to port operators and finally, high quality services would be provided to customers.

Bibliography

1. Iordanoaia Florin, "Logistics in transports", Publisher "Nautica", Constanta, 2007, pp. 149-151.
2. Ameropa Group, "Sustainability Report 2020", Bucharest, 2021. (https://www.chimpex.ro/imgs/2020_Raport-sustenabilitate-Ameropa-Romania.pdf).
3. Commercial Company "ADM Romania Trading" Ltd, "Sustainable development programs", Bucharest, 2022. (<https://www.adm.com/en-us/sustainability/goals-and-programs/>)
4. Commercial Company "Chimpex" SpA, "Company policy", Constanta, 2021. (https://www.chimpex.ro/ro/politica_companiei/).
5. Commercial Company "Comvex" SpA, "Annual Report", Constanta, 2022. (https://www.comvex.ro/wp-content/uploads/rapoarte/2021/Comvex_Raport_anual_2020.pdf)

6. Commercial company “Constanta South Container Terminal” Ltd, Project “Modernization and development of the capacity of the port of Constanta - development of the port infrastructure in the development area A, MOL II-S Constanta South Port by expanding the port platform facilitating multimodal transport”, Constanta, 2021. (<https://www.dpworld.com/constantia>).
7. Commercial Company “Decirom” SpA, “Official Documents”, Constanta, 2022. (<http://decirom.ro/>).
8. Commercial Company “Frial” SpA, “Official documents”, Constanta, 2022. (<https://frial.ro/despre-noi/>).
9. Commercial Company “Oil Terminal SpA Constanta”, “2021 Annual Report”, Constanta, 2022. (https://oil-terminal.com/despre_oilterminal/investitii/).
10. Commercial Company “Socep” SpA Constanta, “2021 Annual Report”, Constanta, 2022. (<https://www.socep.ro/news/>).
11. Commercial Company “Umex” SpA, “Annual Report 2021”, Constanta, 2022. (<https://umex.ro/documente-publice/>).
12. Commercial Company “United Shipping Agency” Ltd, Constanta, “Cofco International Romania” Group, “Development strategies”, Bucharest, 2022. (<https://www.cofcointernational.com>).
13. Hamburg Port Authority (HPA), “Official Documents”, “Smart Port”, Hamburg, 2022. <https://www.hamburg-port-authority.de/en/hpa-360/smartport>
14. Ministry of Transport (MT), “Strategy for sustainable transport for the period 2007-2013 and 2020, 2030”, Bucharest, 2008. (https://www.mt.ro/web14/documente/strategie/PLAN_STRATEGIC.pdf).
15. National Company “Maritime Ports Administration” SpA Constanta (MPA), “Programs and strategies”, 2022. (https://www.portofconstantza.com/pn/page/np_programe_strategii). (https://www.portofconstantza.com/pn/page/np_modele_cereri).
16. National Company “Maritime Ports Administration” SpA Constanta (MPA), “Annual Report 2021”, Constanta, 2022, pp. 19-20. (https://www.portofconstantza.com/pn/page/np_rapoarte_studii).
17. Rotterdam Port Authority (RPA), “Online Work Tools”, Official Website, Rotterdam, 2022. <https://www.portofrotterdam.com/en/services/online-tools>
18. Thessaloniki Port Authority (TPA), “Smart Marketing Department”, Thessaloniki, 2022. <https://www.thpa.gr/index.php/en/olth/2014-01-04-22-57-18/organizational-structure>
19. <https://www.google.ro/maps/>.