Port management importance in port activities development

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Abstract: Setting up an effective organization is the essential factor deriving from its managerial capacity in the competitive economy we strive after. This capacity is not only a fundamental attribute but the conditioning parameter and guarantor of organizations sustainability and longevity in an effervescent environment that is continuously changing of the competitive economy. In such a context, the present paper is an important means of emphasizing the management importance in a separate area of the real economy, namely the port economy. The paper presents two major issues brought about by the current and future development of transport industry in port activity, namely those related to port reform and defining elements of port management in order to substantiate a viable program. Like all economic entities in the port sector as well, management is looking for through various objectives, enabling the port management to accomplish the intended goals, to adopt measures and courses of actions and development which comply with the environment in which they evolve.

Keywords: port, port companies, shipment, port management, port reform, port activities, port service.

1. Aspects of port reform
The constant need for change that the developing countries have been facing is the result of a combination between their domestic situation, unsatisfactory both economically and socially and the continuously changing of the external environment. We mention that without being properly prepared, the developing countries have been subject to the same forces generated by globalization and increasing economic competition with developed countries.

This exposure occurred while opening their domestic markets, which allowed benefits generated by the recent international trade opportunities (i.e. benefits induced by internal market opening and liberalization of foreign trade). Besides the direct benefits resulting from a shift towards an exports-based strategy, the trade liberalization and opening domestic markets has allowed developing countries to acquire the necessary technology, know-how and foreign experience, which together with the increase levels regarding the use of electronic data interchange (EDI - Electronic Data Interchange) will stimulate the economic development process.

In this regard, an export-based strategy requires adjusting the economic, commercial and most often social characteristics of a country in order to accomplish a business approach from an ethical perspective and of current practices in the international competition game.

Taking into account the rapidly changing environment of technological innovation and of the increasingly sophisticated demand, the economic transition to market-oriented practices is neither easy nor smooth. Moreover, the required time for a gradual assimilation of transition and evolution to economic and social conscience is lacking. On the other hand, it should not be neglected the possible pressure which is not uncommon however, from various interested groups, often even justifiable, which is designed to protect the environment, ethics, traditions, culture and the religious values.

At the same time, the high levels of port development and transport have been frequently argued to slow the developing country exports, which already lack diversification and are dependent on commodity prices on international markets.

For these reasons, these countries have resisted the principle of “comparative advantage” as a cause of worsening the international trade and of generating discrepancies on the balance of payments, that have a negative influence on the other hand on the economic increase opportunities through diversification.

Another important aspect of the port industry and international cooperation is of multimodal transport systems, made the most of the transshipment hub at the junction of corridors. For this reason, are very important model for cooperation and integration of systems, which are compiled based on development decisions, and operating cash flows. Currently, there are a number of factors consisting of complex
development of integrated multimodal transport, logistics and EDI networks, which have a major impact on the optimal conditions for carrying out port, so independent trade houses and multimodal transport, simply by accessing The program can scan markets for products and services, can select routes, methods of transport and transport in such an integrated approach that ensures quality, speed and safety while optimizing transport and generalized costs and cost balancing time.

In this particular environment, governments have been increasingly aware of the impact of the unsatisfactory and at the same time expensive port service offer may have on the development of international trade and national economy. Moreover, unsatisfactory quality port services not only "redirect" the profits away from local producers but remove that country out of international trade market.

In this regard, goods containerization has revolutionized the international transport and also the port industry. This technical solution has had a significant impact on vessels architecture and size, on their design, development, port operation, on the transport requirements and currently on the perceptions related to the development of integrated transport chain. This transport system has several significant advantages over the traditional way based on physical labor. In addition to major progress in terms of safety operation, loss-reducing, litigation, the main quality of the integrated system is the reduction of the physical work, which is expensive and the considerable reduction of the time spent on operating a vessel.

Due to heavy, expensive and inefficient operating procedures encountered before vessels containerization, the general cargo ships were famous for the long periods of time spent in ports, waiting, loading or unloading. For this reason, in many cases the shippers had tried to avoid ports and had chosen other types of transport (rail or road).

Moreover, delivery speed increase has imposed due to goods diversification, qualities that have determined the reduction of transit times to increase the shippers’ circulation of goods and to diminish the inventories costs. However to the previously mentioned aspects there should be added the use of advanced principles of logistics and accuracy increasing that have contributed together with punctuality and safety liner that made possible the adaptation of the producing industries to "just-in-time" and "make-to-order" flexible concepts. Among other benefits, these manufacturing technologies have provided the opportunity to integrate into the development strategies, the uncertainties related to seasonal or other cycles of business and trade.

Unit problem must be addressed organizational restructuring and management in shipping and maritime, focusing primarily on areas such as development of models for unconventional indicators (which take into account the characteristics of transport logistics in general) and indicators measuring river and maritime transport competitiveness indicators implemented in the organization of transport scenarios to highlight the impact on the environment, energy and other resources. Scenarios and management procedures based on business models and organization and is based on the fact that the market requires integrated transport systems, aimed at aligning the activities undertaken by different actors in the transport market and organizations. Also developing new concepts of innovative logistics must have these initiatives focusing on new services (for small and medium-range), based on the requirements of shippers and logistics service providers (services at the right time, promptly to request). In conclusion, we can say that developing countries are aware of the importance of effective national port, seen as catalysts for international trade and essential elements in their economic development.

2. Port management place and role in transport activities development

Transport has been considered as the subsystem of a technologic system that incorporates both production and transport itself thus leading to several important consequences, which may be identified in the steps of a modern port developing. Theoretically speaking, the port is an integral part of several transport systems. Thus a port is the geographic location where several production chains are converging. A "section" through these chains shows that these production chains are converging in various stages of completion-perception, allowing the port to play a major role in the integrated logistics chains. Basically a lot of activities take place in the port terminal, like storage, transport and transshipment activities (trans-shipment).

The conclusion that emerges is that although the transport system is mainly the same, there are the same traditional stages in which a product goes on its evolution path from origin to final consumer, the technological development leading to interrelated changes on these stages, changes that generate the need to adapt to various "actors" which can be encountered on the value chain. Transport industry has undergone significant changes over the last three decades. This aspect has had a continuous and fundamental impact on the transport operations and management.
The general management principles can be also applied to ports, port management being actually a service system management.

In this context, the port and port management objectives should be designed to meet the commercial and marketing department requirements, considered as important procedures to follow by the port in order to accomplish its goals.

The practice in this particular area indicates that port management objectives should be specific, quantitative and focused on the port services production by port authorities and operators and to be defined so as to facilitate the application of certain necessary actions in order to achieve these objectives that would allow the outcome control and evaluation.

Like any other economic entity, the objectives can be grouped into general objectives and secondary objectives in the port field as well. **General objectives** apply to port community and frequently to port authority. The role played by the port in developing national economy and region should be taken into account in their definition.

From the macro perspective, port defines its objectives by facing the limitations imposed by the political power. It can control the practice of price or port services quality and on the other hand, can take advantage of the assistance from public power, by funding its infrastructure or benefiting of favorable tax provisions.

On the microeconomic level, the port is able to set up freely its management objectives, thus port representatives will establish port exploitation and development objectives, based on the port interests that should meet the social requirements as an economic and commercial enterprise.

Regarding the **secondary objectives**, they must be accurate, applicable to all port operators, port operators and services. Those objectives would be better defined and their development to follow a series of requirements, such as:

- must be applied at all levels and for each management unit in hand;
- must be independent;
- their number is limited;
- each unit of organization (the port authority, operator) must have their own objectives and their number should be even lower as it descends the steps of command;
- main objective should be coordinated with the work "key" port company.

By every objective, management seeks to enable the port management that will manage forms closest to achieving the aims of his.

Meanwhile, port management has many tools that port managers to operate and manage the organization. The main instruments are the administrative, economic, financial, commercial, technical, operational and human resource development.

**Administrative instruments** specific to ports are company structure and regulations are necessary. The current trend is to have a structure reduced by restricting the number of divisions (and not create additional administrative structures) and in their production units to be created, with financial interests. Port organization structure must be consistent with the functions they must perform. Regulations, intended to inform customers and port users on the measures taken to ensure proper functioning of the organization, these rules are set by the port authority. Laws and regulations should be as small numbers refer to the key issues.

**Economic instruments: the main tools of economic management port are:**

- The system for collecting and transmitting data and port statistics - data, information necessary for this system may be provided by the specialized press, the general studies conducted outside the port community, financial and statistical documents issued or made by nationally competitive services port.
- Scoreboard - is an economic instrument, which provides a periodic collection of all the economic parameters that determine the development activities of the port. This allows monitoring of port activity and is an important tool for economic decision.
- Pricing port - is another major economic tool for both the port authority and operator.
- Port Planning - is aimed at preparing an economic tool for the future port. Port development planning must be done systematically according to most parameters of the port system development. A major holds strategic planning, which aims to minimize the costs of developing the port, it shall adopt, by rule, under conditions of uncertainty of achieving its goals.

**Financial instruments** - the main financial instruments are:

- general accounts - is a way for port managers to manage monetary and financial flows.
- analytical accounts or cost - allowing the progress of expenditure and income income and expenditure on facilities, and serve as a basic financial education, economic, tariff and provides tools for logical decisions.

**Commercial instruments** - trade is the main tool to collect and analyze business information, followed by research and development structures to promote the port to the port community. Basically, the port of commercial activity is limited to market research, its evolution, the level of demand and competition. Depending on their results, "convince" the need to release the port company
funds to purchase necessary equipment or infrastructure improvements, will establish regulations for the operation of port facilities to enable their use in optimal conditions and will oversee the quality of services all links in the chain of transmission to function normally under a strong competitive environment.

**Technical and operational instruments** - because the current period, characterized by profound structural changes and business practices and international freight, each port must be adapted to technological changes that are intrinsic to modern technologies. After knowledge of technological change in port, and traffic forecasting results, the next step is to examine how the port will be used respectively to define the operational or operational systems of the port. Operational systems play a role in choosing equipment in development plans or development of infrastructure, and human resources development plan. Moreover, maintenance of equipment has become one of the major internal functions, authorities and port operators, a key factor in the functioning of operational and cost reduction.

**Human resource development** - most important tool available to port managers is the port staff, which is the hardest instrument to master and used as the port area outside their particular people management, difficulties arise and tradition, historical conditions, which can sometimes be incompatible with the principles of modern management. Personnel qualifications required are more complex (education, skills, mobility) for staff to be able to assume the responsibilities necessary. Staff quality assessment refers to the degree of achievement of objectives that have been fixed, innovation capacity, behavior with colleagues, customers and to the organization.

### 3. The necessity of a sustainable port management implementation

All European maritime or river ports are facing complex problems: a demand for transport that is constantly fluctuating, significant technological changes (containerized transportation, telecommunications, computerization), environmental constraints, including intermodal transport management that encourage the port’s role, the need of communication between all port activities as well as the compliance with community rules and regulations on competition and transparency. Moreover the European transport integration of a problem of integration of large dynamic systems based on the adaptation of national systems to the European ones, on infrastructure networks harmonization, the harmonization of the existing standards and regulations. At the same time, the strategies that should be adopted involve the risk avoidance so that less developed transport systems to orbit around the developed ones, providing solutions to the authority issues and that of logistics power in integrated system.

![Fig. 1: Port management place and role in the economy dynamics](image-url)
management program, whose components are focused on operating items, maintenance or development of port activities in the view of achieving the efficiency parameters. The basic components of such a program can be structured as follows:

- **Financial resources management** – despite decentralization and the high degree of financial autonomy, port sector funding witnesses in the EU Member States different levels of financial autonomy and granted public funding, but also the lack of transparency in the pricing of port services. In this regard, there should be established instruments related to income yield and means of development of these budgets as well as financial instruments between the government and port authorities. Also in this direction is necessary to establish fair and transparent conditions for investors, port operators and users, aimed, in particular the role of port authorities, public financing, leasing ports, water services, technical services, goods handling, port charges and competition with other countries.

- **Land Management** – many ports face hindrances due to capacity connections or organization. Thus, ports expansion and constant changes of naval and maritime traffic have not kept up with the requirements of port facilities (a shortage manifested in port installation, difficulties in achieving terminals modernization, improper location of facilities). Therefore the insurance of proper conditions regarding the access to port land and services is crucial in managing integrated port system. It must also review and improve regulations on land use, upgrading information systems and creating databases on ports, waterways and preliminary data traffic, new security and telecommunications systems, automated acquisition of new port equipment, but European surveillance systems interoperability, an important role in simplifying transport and encourage market development and maritime shipping in the internal market.

- **Infrastructure** – requires standards, processes, equipment for the proper performance of all port activity, using various legal and institutional systems as tools for management regarding infrastructure. Another important aspect that should be taken into consideration is the port terminal concession on certain periods of time (the example of many EU member states) since it offers many advantages, the most important being the following: more rapid handling of goods, reducing the vessels turn times and of the waiting time for goods, reducing operating costs, more transparent purchasing procedures, lower charges for handling of goods but also investments increase with a positive economic impact.

- **Environment Management** – environmental laws ensure sustainable port operation. In this respect progress has been recorded in environmental management, while the constraints in terms of environmental protection applied in the port sector projects have led to the emergence of some complex procedures. In addition, costs of compliance with environmental standards are primarily the level of their performance and port dimensions. In this respect, many EU member states have raised uncertainty of environmental legislation and its implementation in different national laws, proposing the development of guidelines for their interpretation to allow for better environmental management. Important is the creation of adequate waste treatment facilities, proper management of water bodies and sediments, and climate change and air pollution. Increasing standards of environmental management in ports and achieving a balance between environmental protection and growth process involving the use of economic resources following: legal and institutional framework as a means of regulating the implementation of management strategies, prices and taxes as a means to control the allocation resources and services, and coordination of environmental issues and strategies to improve the activities related to waste management, pollution abatement, water quality improvement.

- **Human resource management and other social aspects** – professional training is significantly important for a secure and efficient operation of ports. However currently there are no specific community rules on the professional training of port workers. In this regard, one regulatory option might be considered. But there are general EU rules on health and safety of workers and compliance with those standards is extremely important and should be carefully monitored. It is also necessary to provide more flexible employment and social dialogue can and not least to improve the public image of ports.

### 4. Conclusions

Essential changes that have occurred within the transport industry over time, and have had continuous and fundamental impact in terms of port activities and port management.

General principles apply and port management, port management is, in fact, a system management services.

In this context, the objectives of port and harbor management must be geared to meet the commercial and marketing department, considered major pathways followed by the port facilities to achieve.
We can say that developing countries are aware of the importance of effective national port, seen as catalysts for international trade and essential elements in their economic development. In conclusion, the entire port system should focus on overall management of the available resources and at the same time should develop the capacity to tackle service related issues, costs and markets in a much more critical manner than ever. Moreover it is important to adopt concise policies and strategies that can be applied on a long term and which should lead Romanian shipping industry on an upward trend.

References