





### Market analysis report regarding the categories of trades in the port sector and the requirements on professional competence.









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#### 1. Introduction

The UNION OF ROMANIAN INLAND PORTS - UPIR, as project leader, implements the TRAINING4PORT project (no. 02\_PA1a-C1). The project is funded by the START programme of the European Commission and the Municipality of Vienna.

The overall project objective is to identify the existing gaps on the labor market in the port field, related to the compliance of skills of the port operational staff with the needs of employers and the expectations of employees regarding their professional development.

One of the project's specific goals is to develop a strategy and action plan for the implementation of a competency-based training for employment in the port sector.

# 2. Inventory of the current situation in the port sector regarding categories of trades and professional requirements

#### **2.1. Description of sources**

#### The National Qualifications Authority (ANC)

The mission assumed by the A.N.C. is to provide the general framework for achieving continuous training and development of skills necessary to sustain a competitive national human resource, capable of operating effectively in nowadays society and a knowledge community.

In accordance with the laws on adult vocational training and the national education, the A.N.C. acts as the national coordinating point for the European Qualifications Framework, with the following duties:

- develops, maintains and implements the National Qualifications Framework and the National Qualifications Register;
- develops criteria and procedures for assessment and certification of professional competencies assessors, assessors of assessors and of external assessors;
- develops and implements national, international and European programmes to achieve its missions;
- ensures quality in continuous vocational training of adults, including through development and implementation of methodologies, standards and procedures, in collaboration with the concerned institutions;
- coordinates the continuous training of adults and cooperates with international institutions in this field

• assesses and certifies the assessors of professional competencies, assessors of assessors and external assessors;







"Part – financed by the European Union"

• carries out activities of transfer of knowledge, training, counseling and technical assistance in its field;

#### <u>Rubinian.com</u>

Rubinian.com is the website of a consulting firm that appeared on the Romanian market in 2002. It offers documentation and services in business and human resources. On the company website there is published a complete list of the COR code trades and the related skills.

#### The National Centre for Recognition and Equivalence of Diplomas (CNRED)

The National Centre for Recognition and Equivalence of Diplomas (CNRED) is part of the Ministry of Education and its main activity is the endorsement, recognition and equivalence of education documents and exchange of information with the European network.

According to the law, the CNRED is:

- contact point for professional recognition;
- national coordinator of professional qualifications;
- collaborator with other Recognition Centers ENIC / NARIC, UNESCO-CEPES, IAU, SOLVIT;
- the Ministry's of Education representative to the European Committee for the recognition of professional qualifications and the European Group of National Coordinators for the recognition of professional qualifications;
- promotes and implements the objectives of the Lisbon Strategy, Education and Training Programme throughout life and the Bologna process.







#### 2.2. Categories of trades in the Romanian port sector

- Crane operator
- Bridge crane machinist
- Crane ship operator
- Mechanizer (port worker)
- Loader
- Chief of the loaders" team
- Loader for loading/unloading facilities on the ship and quay
- Lashing loader
- Loader-mechanizer
- Port crane operator
- Machinist on mobile machineries for inland transports
- Machinist on fix transport machineries for horizontal and vertical transportation
- Piling device operator
- Port tractor driver
- Auto trailer driver
- Port auto-loader driver
- Port piling device operator
- Transport agent
- Information clerk
- **D** Trade operator
- Berth operator
- □ Programming operator
- □ Loading-unloading supervisor
- Expedition documents checker
- International forwarding agent
- Reception operator
- Port piling operator
- Port forwarding agent
- D Port dispatcher/planner operator
- **I** TIR and transit expert operator (higher studies)
- Cargo railway agent
- **D** Dispatcher
- Invoice operator
- Warehouse operator
- □ Store-keeper
- Bin operator
- Materials and tools recipient-distributor
- Product sorter
- □ Gas and diesel recipient-distributor
- Administrator worker
- D Port Chief (level of education not stated in the COR)
- Head of Department/Deputy (sector) Transports







#### 2.3. Categories of trades from the port sector in Ukraine

- **C**rane operator
- **D** Piling machine operator
- **D** Tractor driver
- □ Loader-mechanizer

#### 2.4. Classification of trades according to competencies

#### 2.4.1. Joint competencies related to operative professions in Romania

Categories of	Joint competencies	Trades
competencies		
Fundamental	- interpersonal communication	
competencies	<ul> <li>perfecting professional training</li> </ul>	
	- team work	-crane operator
General competencies	- implementation of the Occupational	-bridge crane machinist
	Health and Safety, fire prevention	<ul> <li>ship crane operator</li> </ul>
	norms and ISCIR technical prescriptions	- mechanizer (port operator)
	- filling in the documents	- port crane operator
Specific competencies	- preparing and checking the crane for	
	work	
	- performing the loading, transport and	
	unloading of loads	
	- signaling faults	
	- delivery of the crane	
Fundamental	- work place communication	
competencies	- team work	
	<ul> <li>perfecting the vocational training</li> </ul>	
General competencies	- implementation of Occupational	
	Health and Safety, fire prevention and	- loader
	Environmental protection norms	
	- Implementation of the ISCIR technical	
	prescription norms	
Specific competencies	<ul> <li>preparing the handling of cargo</li> </ul>	
	<ul> <li>cargo handling on surfaces and in the</li> </ul>	
	warehouse	
	- carrying out the final activities of a	
	working step	
	<ul> <li>participating in the handling of cargo</li> </ul>	







	with lifting devices	
Fundamental	- communication in the Romanian	
competencies	language	
	- social and civic competencies	
	- the skill of learning	
General competencies	- compliance with the legal provisions	- Loader for loading/unloading
	relating to health and safety and	facilities on the ship and quay
	emergency situations	- loader-mechanizer
	- compliance with the environmental	
	protection norms	
Specific competencies	- Preparation of the loading / unloading	
	facility of the ship and the quay	
	- The use of loading / unloading facility	
	of the ship and the quay	
	<ul> <li>delivery of the facility for loading /</li> </ul>	
	unloading of the ship and the quay	
Fundamental	<ul> <li>perfecting the professional training</li> </ul>	- Machinist on mobile
competencies		machineries for inland
General competencies	- implementation of the Occupational	transports
	Health and Safety, fire prevention	- Machinist on fix transport
	norms and ISCIR technical prescriptions	machineries for horizontal and
	- filling-in the documents	vertical transportation
Specific competencies	- Preparation and check of the vehicle	- Piling device operator
	for work	- Port tractor driver
	- performing the transportation and	- Autotrailer driver
	handling the goods	- Port auto-loader driver
	- signaling of faults	- Port piling device operator
	- delivery of the machinery and	
	documents	
Fundamental	- interactive work place	
competencies	communication	
	- computer use	
	- perfecting the professional training	
General competencies	- implementation of occupational	
	health and safety norms	- Transport agent
	- prevention and firefighting	- Information clerk
	- monitoring the compliance with	- Trade operator
	environmental safety rules	- Berth operator
Specific competencies	- organizing specific activities on berth	- Programming operator
	- coordinating the activities of complex	- Loading-unloading supervisor
	formations	- Expedition documents checker
	- liaising with the ship representative	- International forwarding
	- coordinating the stacking and storage	agent







	of goods	
	<ul> <li>monitoring specific operations on</li> </ul>	
	berth	
	<ul> <li>coordinating the activities of</li> </ul>	
	expediting the goods	
	- drafting the specific paperwork	
	regarding the operating of cargo in	
	ports	
	- communication in the English	
	language	
Fundamental	- communication in the Romanian	
competencies	language	
competencies	- social and civic competencies	
	- the skill of learning	
	- communication in foreign languages	- Reception operator
	- fundamental skills in Mathematics,	- Port piling operator
	sciences, technology	- Port forwarding agent
Conoral compotoncias	- entrepreneurial competencies	- Port dispatcher/planner -
General competencies	- compliance with legal provisions on	operator
	occupational health and safety and	- TIR and transit expert
	emergency situations	operator (higher studies)
	- compliance with environmental	- Cargo railway agent
	protection norms	- Dispatcher
Specific competencies	- the organization of specific activities	
	on the ship	
	- coordinating the teams of loaders and	
	mechanizers	
	<ul> <li>cooperating with the ship</li> </ul>	
	representative	
	<ul> <li>monitoring the stacking and storage</li> </ul>	
	of goods on the ship	
	- making the paperwork	
Fundamental	- communication in the national	
competencies	language	
	- communication in foreign languages	
	- fundamental competencies in	
	mathematics, sciences, technology	
	- IT competencies	
	- learning skills	- invoice operator
	- social and civic competencies	
	- entrepreneurial competencies	
	- competencies of cultural expression	
General competencies	- planning the organizational	1
	framework	







	quality assurance	
	- quality assurance	
	- Enforcing the occupational health and	
	safety and fire prevention norms	-
Specific competencies	- Verification of invoices	
	- Drawing up the invoices	
	- Record keeping	
	- Receipt of goods	
Fundamental	- communication in the national	
competencies	language	
	- communication in foreign languages	
	- fundamental competencies in	
	mathematics, sciences, technology	-Warehouse operator
	- IT competencies	- Store-keeper
	- learning skills	- Bin operator
	- social and civic competencies	- Materials and tools recipient-
	- entrepreneurial competencies	distributor
	- competencies of cultural expression	- Product sorter
General competencies	- quality assurance	- Gas and diesel recipient-
	- Enforcing the occupational health and	distributor
	safety norms	- Administrator worker
Specific competencies	- ensuring the management for the	
	stock of goods	
	- drawing up the record paperwork and	
	activity reporting	
	- management of documents used	
Fundamental	- communication in the Romanian	
competencies	language	
·	- social and civic competencies	
	- learning skills	
General competencies	- compliance with legal provisions on	- lashing loader
	occupational health and safety and	C C
	emergency situations	
	- compliance with environmental	
	protection	
Specific competencies	- preparation of tools and devices	1
	necessary for the execution of lashing	
	operations	
	- preparation of materials for lashing	
	-execution of lashing operations	
	execution of lashing operations	l







#### 2.4.2. Joint competencies corresponding to the jobs with leadership role from Romania

Categories of competencies	Joint competencies	Trades
Fundamental competencies	<ul> <li>communication in the national language</li> <li>communication in foreign languages</li> <li>fundamental competencies in mathematics, sciences, technology</li> <li>IT competencies</li> <li>learning skills</li> <li>social and civic competencies</li> <li>entrepreneurial competencies</li> <li>competencies of cultural expression</li> </ul>	<ul> <li>Head of the loading team</li> <li>Port chief</li> <li>Head of Department/Deputy</li> <li>(sector) Transports</li> </ul>
General competencies	<ul> <li>quality assurance</li> <li>Enforcing the occupational health and safety norms</li> </ul>	
Specific competencies	<ul> <li>planning the transport</li> <li>coordinating the supply</li> <li>planning and coordinating the storage and distribution of goods activities</li> </ul>	







#### 2.4.3. Competencies corresponding to the operative jobs in Ukraine

Categories of competencies	Competencies	Trades
Specific competencies	- Knowledge of crane cables,	
	cranes, forklifts for shelves, stacker	
	cranes with automatic control,	
	monitoring of cranes equipped with	
	radio control;	arana anaratar
	<ul> <li>Knowledge of the structure and</li> </ul>	- crane operator
	mechanisms related to the crane;	
	- Knowledge of transportation,	
	basics of the process of transport,	
	transport of items, assemblies, parts	
	of machines and mechanisms, visual	
	determination of the assets;	
	- Knowledge of specifications and	
	requirements that apply when	
	starting the machine.	
Specific competencies	- Knowledge of forklift	
	manufacturing	
	<ul> <li>Cargo handling methods for all</li> </ul>	
	types of transport	
	- Regulations of lifting, handling and	
	storage	- piling operator
	<ul> <li>Compliance with orders,</li> </ul>	
	instructions received from the	
	supervisor	
	- Enforcing the occupational health	
	and safety, fire prevention and	
	occupational hygiene norms	
Specific competencies	<ul> <li>graduate of secondary vocational</li> </ul>	
	education	
	<ul> <li>driving license category 'E', driving</li> </ul>	
	skills.	
	<ul> <li>knowledge of tractors, providing</li> </ul>	
	repairs and maintenance	
	<ul> <li>physical strength and endurance,</li> </ul>	- tractor driver
	qualities such as discipline,	
	responsibility, having good hearing	
	and a good sight.	







Specific competencies	- programming knowledge, principle	
	of operation, arrangement of data,	
	load limits serviced by cranes,	
	apparatus, instruments and devices	
	for handling	
	- information relating to rolling	- loader mechanizer
	materials	
	- knowing the name of goods, visual	
	determination of the mass of the	
	transport load;	
	-rules and methods for loading,	
	unloading, handling and packing of	
	goods;	
	<ul> <li>construction of cargo areas;</li> </ul>	
	<ul> <li>types of packaging, packing and</li> </ul>	
	labeling of goods, the cargo load	
	sizes permitted to transport on	
	rolling materials (locomotives,	
	wagons) and in vehicles	
	<ul> <li>unloading the cargo from wagons</li> </ul>	
	and stacking them	
	- the production load and	
	technological sequence of	
	operations in the basin;	
	- enforcement of occupational	
	safety and signaling for	
	conventional cargo handling	
	- knowing the basics of conducting	
	commercial transactions.	







# **3.** Identification of the employers' requirements regarding the categories of crafts in the port sector and the necessary skills

#### 3.1. Description of the stakeholder's industry

River transport services and freight forwarding contain, on the one hand, their movement on the river and, on the other hand, services related to handling, storage, issuance of documents and settlement of all services rendered.

Currently, inland navigation in Europe and on other continents has an increasing share of overall freight transport. From the statistical data published it results that, for example, in Central Europe, inland navigation has nearly 1/3 of all traffic, with a permanent upward trend.

After sea transportation, river transportation is the cheapest way of transport. According to current tariffs, inland transportation is about 2-3 times cheaper than railway transpiration and much cheaper than airways or road transportation.

The economic nature is primarily due to high transport capacity. Thus, while a convoy of nine barges can carry a total quantity of 18,000 tons of cargo, a trainset with nine wagons of 25 tones can only carry 225 tons.

Secondly, the economicity of river transport is due to reduced costs in the infrastructure, compared to railway or road infrastructure. Therein lays the paradox that you cannot navigate safely inland and the engineering works are very expensive. The main advantage of river transport is related to the environmental pollution level which is very low especially when compared to road transport.

River transportation has lower risk and takes less time compared to sea shipping, which allows the use of less expensive packaging and payment of lower insurance premiums.

In addition, there are a number of large goods with a low unit value, such as limestone, marble and other building materials which could not be drawn into the internal and international economic circuit without the existence of cheap transports, such as sea and river transport.

Also, the waterways allow development around them of industries that use as raw material mass goods transported cheaper by water (the steel industry, ferrous metallurgy and nonferrous metallurgy, shipbuilding, oil processing industry, chemical and petrochemical industry, energy industry, glass and construction materials, etc.), creation of dams, reservoirs for hydropower, development of irrigation and recreational areas etc. In their turn, these stimulate investment in other sectors of the economy, creating new jobs and therefore economic growth.

There are also a number of disadvantages to river transport. First of all, it is conditioned by the presence of waterways, which limits the action to their surrounding area.

Apart from a specific area of the river basin, it becomes uneconomical due to high tariffs and costly transshipment practiced by the means that take over the transport.

It is relatively slow and unpunctual compared with the railway, road or airway transport. This inconvenience is due mainly to the fact that river transport is influenced by weather and hydro conditions. It can become impassable in freezing conditions, low levels or very high levels of water etc.







#### **3.2.** Description of Stakeholders

1. Stakeholders in Romania

<u>S.C Docuri SA</u> - provides a wide range of port services, being equipped with storage capacities, and means of mechanical handling, lifting, transport and stacking of goods, being specialized in grain and bulk cargo traffic. It has a turnover of 6,777,343 RON and a total of 11 employees.

<u>S.C.Port Bazinul Nou SA</u> - is the largest port on the Danube, providing forwarding and chartering services for a wide variety of products. It has a turnover of 34,767,328 RON and a total of 289 employees.

<u>S.C Trans Europa Port SA</u> - has the following fields of activity: loading / unloading of ships; stowage of goods; cargo lashing; warehouse storage of goods. It has a turnover of 14,776,286 RON and a total of 160 employees.

<u>S.C City Gas SA</u> - has as object of activity the handling, storage, loading / unloading of LPG (liquefied petroleum gas) in the terminal opened in the Free Zone of Galati.

The operations can be executed in the Terminal City Gas Galati are the following:

- transfer of LPG from CSI wagons to EU wagons (transfer rate of 12 CSI wagons/24 hours, approximately 350 tones);
- transfer of LPG from CSI wagons to tankers;
- transfer of LPG from CSI wagons to land tanks;
- Unloading of LPG ships in EU wagons, CSI, tankers and land reservoirs (loading rate of 16 EU wagons / 24 hours, about 600 tones, with the possibility of increasing the rate of loading to 1,000 tones / 24 hours with the completion of construction of the second railway line for EU wagons).

It has a turnover of 81,425,165 RON and a total of 21 employees.

<u>S.C Frigorifer SA -</u> provides performing logistics services: packaging, storage and transport of frozen food for both internal and external partners. It has a turnover of 41,365,438 lei and a total of 121 employees. We have been informed that Frigorifer SA is no longer providing port activities.

<u>S.C Deltanav SA</u> - provides operations of loading, unloading and storage of bulk goods and port maneuvers with own thrusters. It has a turnover of 41,365,438 RON and a total of 88 employees.

<u>S.C Hercules SA</u> - operates in the Braila port and is a port services operator who loads / unloads in / from sea and river ships, storing merchandise on platforms or in its warehouses. It has a turnover of 252,827 RON and a total of 231 employees.

<u>S.C Romanel International Group SA</u> - has a range of activities ranging from logging, conversion of logs into boards, drying to obtain the finished timber, to transporting goods from Braila or in container and delivery it to the largest retail sites in the world.







<u>S.C Romportmet SA</u> – operates in the field of port services, and its main activity is the cargo handling. It has a turnover of 26,090,774 RON and a total of 163 employees.

<u>S.C Unicom Oil Terminal SA</u> - the main activity consists of: unloading, transferring, transshipment, storing, conditioning, and loading of petroleum products and petrochemical products in and from railway wagons, tankers, ships and barges.

<u>S.C Spet Shipping SA</u> - has provided fast, reliable and quality transfer services for freight and passenger on ferries. This company has not filed balance since January 2012, entering into insolvency.

<u>S.C CNFR Navrom SA</u> - the company offers customers integrated services: freight, passenger transport, ship repair, ship design and layout, etc.

<u>S.C Dobroport SA</u> - operates in the field of port services, and its main activity is the cargo handling. It has a turnover of 4,023,425 RON and a total of 33 employees.

<u>S.C Scaep Giurgiu Port SA</u> - using operating equipments it performs loading and unloading of ships, wagons / cars in combined and direct traffic. Meanwhile, the company features port platforms, warehouses for goods storage and silos for storing grain. Equipped with a fleet of ships, the company carries out domestic and International River transport of goods, such as: grain, coal, chippings, rollings, etc. It has a turnover of 4,823,254 RON and a total of 62 employees.

<u>S.C Exploatare Portuară "Drobeta" SA</u> – the object of activity consists of handling cargo in ports on the Danube between km 795 and km 1049; shipment of goods inland and internationally; extracting and marketing of gravel products from the Danube; processes the natural shore with floating cranes; repair, maintenance and technical support of port machineries; management and renting of port buildings for third parties and various other benefits. It has a turnover of 5,748,812 RON and a number of 125 employees.

<u>S.C Tehnosteel Vest SRL</u> - provides port services, having as equipment: mechanical means of handling shipping containers, lifting, loading and unloading of oversized loads. It has a turnover of 996,828 RON and a number of 3 employees.

2. Stakeholders from the Republic of Moldova

<u>ÎCS Danube Logistics SRL</u> - the Giurgiulesti International Free Port is capable of receiving both river and sea ships. In this context, GIFP represents for its clients:

- the only direct river-sea point of transshipment and distribution to / from the Republic of Moldova
- a regional logistics center at the border of the EU with access to road, railway, river, sea communications, and







• an excellent location for business development, due to its strategic location, tri-modal transport infrastructure, low cost environment and unique customs and tax regime.

<u>Fluvial Port Ungheni</u> – provides services of transport and expedition of goods.

#### 3. Stakeholders from Ukraine

<u>Danube Shipping Management Service Ukraine</u> – organizes transports along the Danube, carrying iron ore and coal from the Ukrainian and Russian manufacturers through the Ukrainian ports from Reni and Izmail to the largest steel factories in Europe. It also transports chemicals and products for the steel industry, such as iron ore and raw materials for the ports on the Danube.

<u>Sea Commercial Port of Izmail</u> – provides the following services: transshipment, arrangement and storage of goods; issuing documents accompanying transport and customs operations; Danube river transport of small quantities of cargo for Bulgaria, Romania and Yugoslavia.

<u>Commercial Sea Port of Reni</u> – provides the following services: loading / unloading of goods from the ship and their storage; offers a berthing place for vessels and for achieving handling operations; issues documents related to customs operations and transport of goods; organizes all necessary operations for the arrival and departure of a ship; performs fumigation and degassing of a vessel; provides services of customs broker; transports goods; other services which may be provided on request.

#### 3.3. Description of the Questionnaire for market research

The questionnaire has 4 Sections containing the following information:

- the first section contains general information about the employer;
- the second section is intended to the categories of trades necessary in the port sector;
- the third section contains a description of the skills required to the operational staff in the port sector;

- in the last section there is the strategic dimension of training / development in the port sector.







#### 3.4. Analysis of market research (results and conclusions)

#### Romania:

Of a total of 16 stakeholders, only 8 companies from our data base responded to our questionnaire.

The other 8 companies haven't responded to our solicitation for various reasons and namely:

- S.C Frigorifer SA is no longer active in the port sector
- S.C Spet Shipping SA are in insolvency

- S.C Technosteel Vest SRL – the phone numbers are not allocated and the e-mail sent received no reply

- The other 5 remaining companies, namely SC Trans Europa Port SA, SC Deltanav SA, SC Romanel International Group SA, SC Unicom Oil SA, SC CNFR Navrom SA, have not completed our Questionnaire, arguing that the persons in charge with completing this questionnaire were on vacation.

#### The Republic of Moldova:

From a total of 2 stakeholders, no company from the port sector responded to this questionnaire. The questionnaire was completed only by the "B. P. Hasdeu" State University in Cahul, which was not included in the stakeholders in our database.

#### Ukraine:

Of a total of seven stakeholders, a total of 4 companies responded to the questionnaire, the other not participating in the market research.

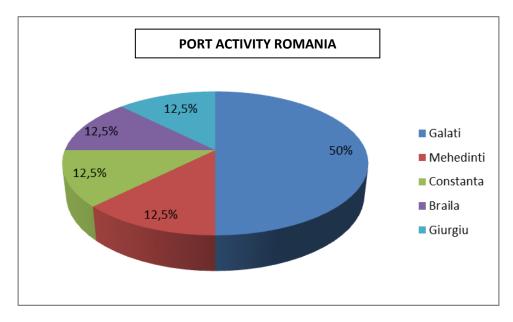




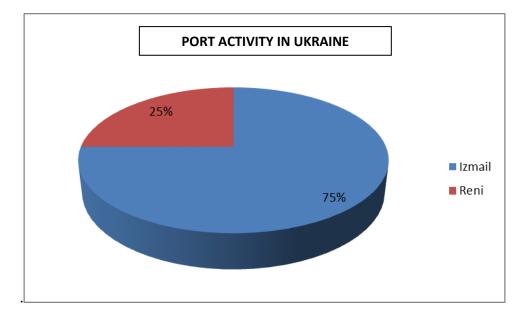


#### 3.4.1. Section I: General information

1. 50% (4 companies) of the respondents in Romania operate in the Port of Galati County, the other respondents operating in the counties of Mehedinti (12.5%), Braila (12.5%), Giurgiu (12.5%), and Constanta (12.5%).



75% (3 companies) of the respondents in Ukraine operate in the Izmail port, 25% (1 company) operating in Reni.



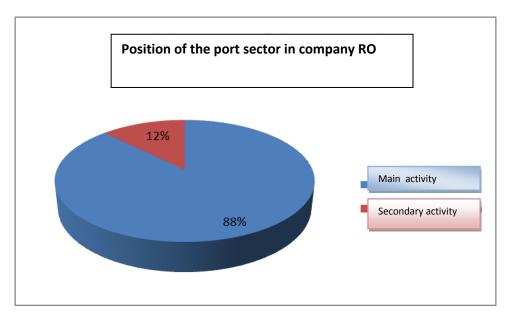
The respondent from the Republic of Moldova did not respond to this question.



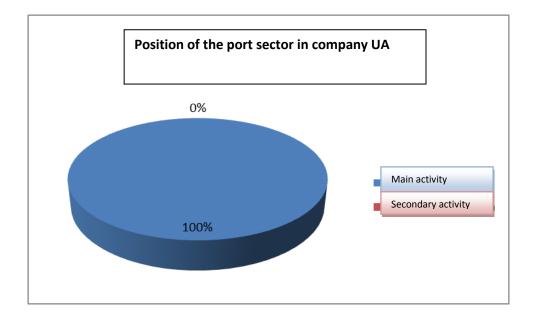




2. 88% of the respondents in Romania carry out a main activity in the port sector, and 12% (1 company) carry out a secondary activity in the port sector.



All the respondents from Ukraine (100%) carry a main activity within the port sector.



The respondent from the Republic of Moldova did not respond to this question.







3. Within the companies in Romania, the following functions are related to the operational staff of the port sector: the most common job was the dispatcher port operator, being mentioned by 88% of companies, followed by the crane operator and loader (75% of respondents), 57% of the companies mentioned the positions of crane operator on floating cranes, forklift operator, warehouse manager, commercial operator, berth operator and head of section. Three of the stakeholders mentioned the positions of lashing loader and port forklift operator, followed by functions that were mentioned only by two companies, namely: port crane operator, port auto-loader driver, loader mechanizer, port tractor driver. Other jobs which had only one mention are: bin operator, head of the warehouse, expeditions operator, line machinist, chief mechanic, sailor, motorist, equipment mechanic , receptionist - distributor materials and tools, input and processing operator, access control agent, port worker, loader / un-loader, turner.

In Ukraine, the situation is as follows: of the 4 respondents, 1 company did not complete this point, and the other 3 companies (75%) mentioned the following functions: dispatcher, chief dispatcher, sailor, mechanic, electrician, store-keeper, machinists, crane operator. The functions which had one mention are: trade operator, planning operator, warehouse chief, customs agent, boiler operator, loader, head of section, head shift.

The respondent from the Republic of Moldova did not respond to this question.

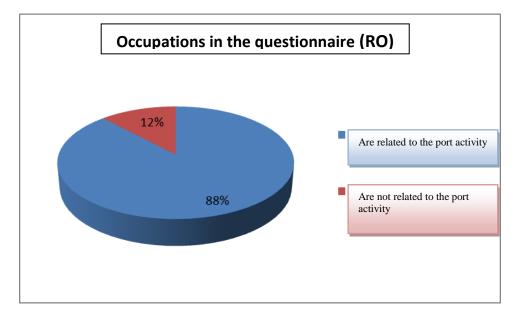






#### **3.4.2. Section II – Categories of occupations required in the port sector**

- 1. 88% of the respondents from Romania consider that all the occupations listed in the questionnaire are related to the port operating activity. 12% of the respondents from Romania (one port operator) consider that the following three occupations listed in the questionnaire have no connection to the port operating activity:
  - a. Machinist on fix transport machineries for horizontal and vertical transportation,
  - b. Transport agent,
  - c. Product sorter.



Of the four respondents from **Ukraine**, 75% believe that all occupations listed in the questionnaire are related to the port operating activities, while one of them (25%) considers that many of the occupations listed in the questionnaire not related to port operating activities, namely:

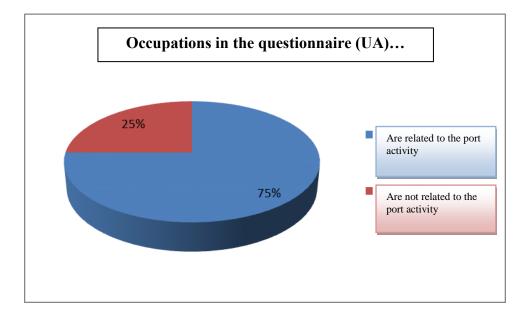
- a. Machinist on mobile machineries for domestic transports
- b. Piling device operator
- c. Port tractor driver
- d. Trailer driver
- e. Port auto-loader driver
- f. Port piling device operator
- g. Transport agent
- h. Information clerk
- i. Trade operator
- j. Berth operator
- k. Programming operator
- I. Loading-unloading supervisor







- m. Expedition documents checker
- n. International forwarding agent
- o. Reception operator
- p. Port piling operator
- q. Port forwarding agent
- r. Port dispatcher/planner operator
- s. TIR and transit expert operator (higher studies)
- t. Cargo railway agent
- u. Dispatcher
- v. Invoice operator
- w. Warehouse operator
- x. Store-keeper
- y. Bin operator
- z. Materials and tools recipient-distributor
- aa. Product sorter
- bb. Gas and diesel recipient-distributor
- cc. administrator worker



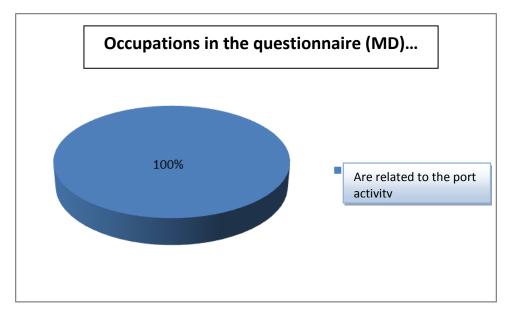
The respondent from the Republic of Moldova considers that all the occupations listed in the questionnaire are related to the port activity.



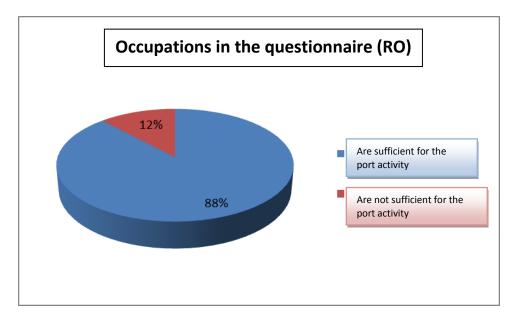




"Part – financed by the European Union"



- 2. 88% of the respondents in Romania agree that the occupations listed in the questionnaire are sufficient to cover all the occupations necessary to conduct the port activity. One single respondent believes that the occupations in the questionnaire are not exhaustive and should be supplemented with other three occupations, namely:
  - a. electrician,
  - b. locksmith,
  - c. simple worker.

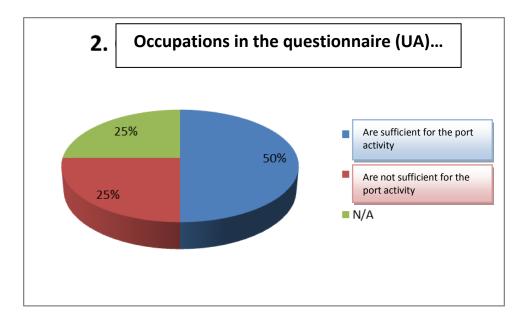




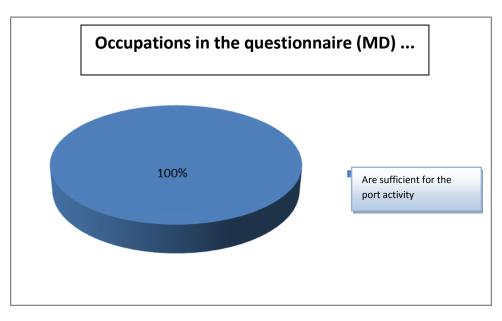




Opinions are divided among the four respondents in **Ukraine**: two of them (50%) consider that the occupations listed in the questionnaire are sufficient to cover all the occupations necessary to conduct the port activity, while a second respondent believes that the accountant and economist professions should be introduced. The last of respondents did not respond to this question.



The respondent in the Republic of Moldova considers that all occupations are sufficient to cover all the positions required for carrying out the port operating activities.









3. For the **Romanian** companies, the occupation with the most personnel turnover (the employees quitting the job frequently) seems to be the crane operator one (mentioned by four of the five respondents, i.e. 80% of cases). Other jobs with high personnel turnover are: piling operator, loader, administrator, simple worker (with one entry each).

Of the four respondents in **Ukraine**, only one mentions problems with high personnel turnover at level of the workers / operators (workpeople), without specifically naming the job positions.

The respondent in the Republic of Moldova did not respond this question.

3. For the companies in **Romania**, the occupations for which it is difficult to find candidates (or it is very difficult to find candidates) seem to be those of crane operator (mentioned by 88% of respondents) and piling operator (mentioned by 44% of respondents). Other occupations which had only one mention are: berth operator, administrator, mobile machinery machinist for inland transport, loader, laboratory operator, bin operator, loader / un-loader, turner. One single respondent (12%) said that it has no trouble in finding candidates for the positions they have in the organization.

One single respondent from **Ukraine** noted that it has trouble finding candidates for the position of captain of the port, different positions of the team of port fleet, simple workers. The other respondents did not respond to this question.

The respondent in the **Republic of Moldova** did not respond to this question.

3. In **Romania**, the positions that will witness a rise in demand in the port sector in the following 5-10 are those of crane operator (mentioned by 88% of the respondents) and piling operator (mentioned by 44% of the respondents). Other positions which had only one mention are: berth operator, port electrician, machinists on mobile machineries for inland transport, lashing loader, administrator, forwarding agent, port engineer, stacking operator, international forwarding agent, auto-trailer driver, turner, loader / un-loader. One of the respondents (12%) did not respond to this question.

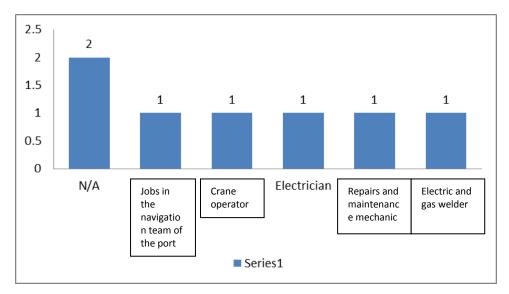
In **Ukraine** one respondent indicated as positions that will witness a rise in demand in the port sector in the following 5-10 years the ones of crane operator, electrician, repairs and maintenance mechanic, electric and gas welder, and a second respondent indicated different positions of the team of port fleet without detailing them. The other two did not respond to this question.







"Part – financed by the European Union"



The respondent in the **Republic of Moldova** did not respond to this question.

3. The positions in **Romania** which are expected to decrease in demand in the port sector in the next 5-10 years, seem to be those of: loader, loader mechanizer, tractor driver, port crane operator, electrician, information clerk, loading/unloading supervisor, product sorter, mechanizer (port worker), and simple workers. Each of the above positions received a single mention.

In **Ukraine**, just one respondent states the decrease in demand, in the next 5-10 years, for the positions of accountant and economist. The other three did not respond this question.

The respondent in the **Republic of Moldova** did not respond to this question.

3. Regarding the positions that do not currently exist in the port sector in **Romania**, but are expected to be introduced in the near future, only one respond was received: port agent (which will operate international shipping vessels that operate through ports at the request of ship-owners). The remaining respondents (88%) did not indicate any position to that question.

None of the Ukrainian respondents responded to this question.

The respondent in the **Republic of Moldova** did not respond to this question.







# **3.4.3. SECTION III – Competencies required to the operational staff from the port** sector

1. Competencies required to the operational staff

#### **Respondents in Romania**

Regarding the **cargo handling** activity in **Romania**, all five respondents (100%) agreed that the required level of education is secondary education. Four of the respondents (80%) agree that this activity demands a qualification (one of the respondents - 20% - has not expressed any option on the need for qualification). All five respondents (100%) consider that this activity requires a regular training, but only one of the respondents considers it necessary to undergo training to adapt to the workplace.

The most frequent fields of skills required for this type of activity are:

- K9 Current operation and maintenance of devices / equipment / machineries used (5 mentions)
- K6 internal procedures and instructions (4 mentions)
- K8 technical and functional features of the held devices / equipment / machineries (4 mentions)
- K14 tying, securing and loading of goods techniques in the handling devices (4 mentions)
- K15 securing of goods techniques in the storage areas from the means of transport and associated risks (4 mentions).

The following have also been mentioned as competency areas required to the personnel in this activity:

- K1, K2, K3, K13, K21, K22, K23, K28 (3 mentions)
- K4, K5, K16, K17, K18, K31 (2 mentions)
- K7, K10, K12, K19, K24, K25, K29, K34, K35 (1 mentions).

### (For the encryption of the various types of competencies refer to the appendix at the end of this section).

Regarding the activity of handling/moving goods using the elevation and handling equipment, all five respondents (100%) agreed that the required level of education is secondary education (one respondent mentioned higher education for the sub-task of moving containers with the help of lifting facilities placed on the quay). Four of the respondents (80%) agree that this activity requires a qualification (one of the respondents - 20% - has not expressed any option on the need for qualification). All five respondents (100%) believe that this activity requires regular training, but just one of the respondents considers it necessary to undergo training to adapt to the workplace.







The most frequent fields of skills required for this type of activity are:

- K6 internal procedures and instructions (5 mentions)
- K9 Current operation and maintenance of devices / equipment / machineries used (5 mentions)
- K8 technical and functional features of the held devices / equipment / machineries (4 mentions).

The following have also been mentioned as competency areas required to the personnel in this activity:

- K1, K2, K3, K5, K14, K15 (3 mentions)
- K4, K11, K21 (2 mentions)
- K7, K10, K12, K13, K16, K17, K18, K31, K35 (1 mentions).

Regarding the **driving of road vehicles activity**, four of the five respondents (80%) agreed that the required level of education is secondary education and that this activity requires a qualification. One of the respondents - 20% - has not expressed any option related to this activity which could lead to the assumption that it is not conducting such an activity. Four of the five respondents (80%) consider that this activity needs regular training, but only one of four respondents believes that training is necessary to adapt to the workplace.

The most frequent field of skills required for this type of activity is:

• K6 – internal procedures and instructions (4 mentions).

The following have also been mentioned as competency areas required to the personnel in this activity:

- K1, K2, K3, K5, K12, K13 (3 mentions)
- K4, K8, K9 (2 mentions)
- K7, K11, K14, K15, K16, K18, K25, K30, K35 (1 mentions).

Regarding the activity of **auxiliary services for ships**, four of the five respondents (80%) agreed that the required level of education is secondary education, but only three of them support the demand of a qualification for this activity. One of the respondents - 20% - has not expressed any option related to this activity which could lead to the assumption that it is not performing such an activity. Four of the five respondents (80%) believe that this activity requires regular training, but only one of four respondents believes that training is necessary to adapt the workplace.

The most frequent fields of skills required for this type of activity are:

- K1 occupational health and safety (3 mentions)
- K2 environmental safety (3 mentions)
- K3 risk of accidents, means of escape (3 mentions)
- K6 internal procedures and instructions (3 mentions).







The following have also been mentioned as competency areas required to the personnel in this activity:

- K4, K5, K8, K14, K19, K20, K25 (2 mentions)
- K9, K16, K18, K31, K38 (1 mentions).

Regarding the **operation of the passenger ships** activity, one of the respondents considers that it takes a secondary education level, while the second respondent considers that, in addition to secondary education, it takes higher education to successfully perform this activity. Three of the respondents (60%) did not express any option related to this activity which could lead to the assumption that they are not conducting such an activity.

The most frequent fields of skills required for this type of activity, noted by the two respondents are:

- K3 risk of accidents, means of escape (2 mentions)
- K24 logistics of the passengers terminal operation (2 mentions)
- K26 customs formalities (2 mentions)
- K38 communication techniques (2 mentions).

The following have also been mentioned as competency areas required to the personnel in this field of activity: K1, K2, K25, K27, K28, K30, K31 (each with one mention).

Regarding the **port work safety and security** activity, two of the five respondents (40%) agreed that the required level of education is secondary education, one (20%) that it requires just secondary education, while the fourth respondent (20%) believes that higher education is needed. The last of the respondents (20%) did not express an option related to this activity which could lead to the assumption that it is not conducting such activity. Four of the five respondents (80%) believe that this activity requires a qualification and periodic training.

The most frequent fields of skills required for this type of activity are:

- K1 occupational health and safety (4 mentions)
- K2 environmental safety (4 mentions)
- K3 risk of accidents, means of escape (4 mentions)
- K4 port safety (4 mentions)
- K6 internal procedures and instructions (4 mentions).

The following have also been mentioned as competency areas required to the personnel in this field of activity:

- K5, K11, K12 (3 mentions)
- K7, K8, K10, K13, K28 (2 mentions)
- K9, K14, K15, K16 (1 mention).







Regarding the activity of **port emergency situations management**, two of the five respondents (40%) agreed that the required level of education is higher education, other two of the respondents (40%) believe that secondary education is sufficient, while the fifth respondent (20%) considers that it takes a combination of secondary and higher education depending on the competencies included for this activity. All five respondents (100%) consider that this activity needs a qualification and periodic training.

The most frequent fields of skills required for this type of activity are:

- K2 environmental safety (5 mentions)
- K3 risk of accidents, means of escape (5 mentions)
- K1 occupational health and safety (4 mentions).

The following have also been mentioned as competency areas required to the personnel in this field of activity:

- K4, K5, K11 (3 mentions)
- K6, K12, K28 (2 mentions)
- K9, K10, K13, K23, K30, K31, K34, K39 (1 mention).

Regarding the activity of **maintenance and repair**, two of the five respondents (40%) agreed that the required level of education is secondary education, while the other three respondents (60%) believe that higher education is needed. All five respondents (100%) believe that this activity requires periodical training, while only four of the five respondents (80%) think a qualification is needed to perform this activity (one of the respondents - 20% - did not mention anything concerning the qualification for this activity).

The most frequent fields of skills required for this type of activity are:

- K1 occupational health and safety (3 mentions).
- K2 environmental safety (3 mentions)
- K8 technical and functional features of the held devices / equipment / machineries
- K11 technical characteristics and rules of operation of port constructions
- K12 functional and technical features of the means for internal transport.

The following have also been mentioned as competency areas required to the personnel in this field of activity:

- K3, K4, K5, K6, K13, K28, K33, K34 (2 mentions)
- K7, K15, K31 (1 mentions).

Regarding the **leading of operational team's** activity, four of the five respondents (80%) consider that higher education is necessary, while only one of the respondents (20%) consider that secondary education is enough. All five respondents (100%) believe that this activity requires a qualification and periodic training.

The most frequent field of skills required for this type of activity is:







K6 – internal procedures and instructions (3 mentions).

The following have also been mentioned as competency areas required to the personnel in this field of activity:

- K1, K2, K5, K8, K11, K12, K33, K34, K38 (2 mentions)
- K3, K4, K7, K9, K10, K13, K14, K15, K25, K26, K28, K30, K35, K37 (1 mentions).

Regarding the activity of **cooperation / collaboration at work**, three of the five respondents (60%) consider that higher education is required, while only one respondent (20%) considers that secondary education will do. The last of the respondents (20%) did not express any option related to this activity which could lead to the assumption that it is not carrying out such an activity. All five respondents (100%) believe that this activity needs training periodically, while only four of the five respondents (80%) think a qualification is required to perform this activity (one of the respondents - 20% - did not mention anything about qualification for this activity).

The most frequent fields of skills required for this type of activity are:

- K5 special regulations concerning the port operation activity (2 mentions).
- K6 internal procedures and instructions (2 mentions)
- K7 port operation technologies (2 mentions)
- K28 computer skills (2 mentions)
- K40 quality management (2 mentions).

The following have also been mentioned as competency areas required to the personnel performing this activity:

• K1, K2, K3, K4, K8, K11, K12, K28, K31, K37, K38 (1 mention).

Regarding the **use of organizational resources in the port activity**, two of the five respondents (40%) consider the need for higher education, while only one respondent (20%) considers that secondary education is enough. Two other respondents (40%) did not express any option related to this activity which could lead to the assumption that they are not conducting such an activity. All five respondents (100%) believe that this activity needs training periodically, while only four of the five respondents (80%) think it takes a skill to perform this activity (one of the respondents - 20% - did not mention anything concerning the qualification for this activity).

The most frequent fields of skills required for this type of activity are:

- K2 environmental safety (3 mentions)
- K28 computer skills (3 mentions).

The following have also been mentioned as competency areas required to the personnel performing this activity:

• K5, K6, K7, K8, K33, K34 (2 mentions)







K1, K3, K4, K11, K12, K23, K25, K26, K27, K29, K30, K31, K32, K33, K34, K35, K40 (1 mention).

All five respondents indicated that the periodic assessment of performance, competencies and skills should to be conducted annually, for all types of activities listed above.

#### Respondent in the Republic of Moldova

Regarding the **verification**, **marking**, **recording of cargo** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt at the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K2, K3, K5, K6, K7, K16, K17, K18, K22, K26, K27, K28, K31, K32, K40, K30

Regarding the **load securing** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K4, K5, K6, K15, K30

Regarding the **cargo displacement** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K13, K14, K30

Regarding the **loading / unloading** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K14

Regarding the **reception**, **storage and forwarding** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K2, K3, K5, K6, K7, K11, K14, K15, K16, K17, K18, K21, K22, K23, K25, K26, K27, K28, K30, K31, K32, K33, K40







Regarding the **manual handling** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K16

Regarding the **auxiliary activities to the operation of RO-RO ships**, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K9, K8, K10

Regarding the **operation of facilities handling bulk liquid**, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K16, K18

Regarding the **activity of warehouse handler**, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K16, K17, K18

Regarding the activity of **moving the load with mobile elevation machineries**, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K30

Regarding the **displacement of containers with the aid of quay elevating facilities** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K30







Regarding the **load lifting and positioning with cranes** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K30

Regarding the **cargo transfer with the aid of ship facilities** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K9, K30

Regarding the **cargo transfer with the aid of ship facilities** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K30

Regarding the **cleaning of ship's storage** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9

Regarding the **tractors driving** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K15

Regarding the **tractors driving within RO/RO ships** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K9, K10, K15







Regarding the **driving of vehicles in/of RO/RO ships** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K10, K15

Regarding the **tying up / untying a ship** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K30

Regarding the **placement of access devices to the ship** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K9

Regarding the **ship fuel supply** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K9, K20

Regarding the **ship water and electricity supply** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K9, K19

Regarding the **collecting of ship generated wastes** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.







The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K9, K18

Regarding the **bonding with passenger's** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K26, K28, K30, K31, K37, K38

Regarding the **transport of passengers to / from the place of embarkation / disembarkation** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K24, K26, K28, K30, K31, K37, K38, K40

Regarding the **satisfaction of passengers' needs** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K9, K37, K38

Regarding the **transfer of passengers to / from small vessels** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K24, K26, K28, K30, K31, K37, K38, K40

Regarding the **processing of travel documents** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K26, K27, K28, K31, K38







Regarding the **processing of passenger luggage** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K26, K27, K28, K31, K38

Regarding the **assurance of occupational health and safety in the port** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K2, K3, K4, K5, K15, K16, K18

Regarding the **safe handling of dangerous goods** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K2, K3, K4, K5, K15, K16, K18

Regarding the **ensuring of safeguards in near water activities**, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K2, K3, K4, K5, K15, K16, K18

Regarding the **ensuring of safety measures in individual activities** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K2, K3, K4, K5, K15, K16, K18

Regarding the **ensuring of safety measures in activities at height** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K2, K3, K4, K5, K15, K16, K18







Regarding the **ensuring of safety measures in activities in narrow spaces**, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K2, K3, K4, K5, K15, K16, K18

Regarding the **ensuring of safety in the port** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K2, K3, K4, K5, K15, K16, K18

Regarding the **response to emergency situations** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K4, K5

Regarding the **response to environmental pollution** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K2, K3, K4, K5

Regarding the **giving of first aid in port** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K3

Regarding the **response to emergency situations on board of ships in port** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K2, K3, K4, K5, K15, K16, K18







Regarding the **planning and coordinating of the current maintenance and repair of port equipment and facilities construction** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K2, K3, K4, K5, K6, K8, K9, K11, K12, K13

Regarding the **assurance of port constructions maintenance and repairs** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K11

Regarding the assurance of maintenance and repairs for facilities, equipment and internal means of transport activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K13

Regarding the **assurance of technical ships maintenance and repairs** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K10

Regarding the **organization and assignment of tasks** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K3, K5, K6, K33, K34, K35, K36, K37, K38, K28

Regarding the **activity leading and supervising**, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

• K1, K3, K5, K6, K33, K34, K35, K36, K37, K38







Regarding the **development of collaboration relations within the structure** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K37, K38

Regarding the **activity of maintaining and developing of cooperation with other structures**, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K31, K37, K38

Regarding the **management of resources** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K2, K19, K20

Regarding the **use of IT systems** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K1, K28

Regarding the **use of radio broadcasting equipment** activity, he considers that the level of education required is secondary education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K30

Regarding the **resources management** activity, he considers that the level of education required is higher education, that there is need for qualification and training to adapt to the workplace, as well as periodic training.

The areas of competency mentioned by the respondent are the following:

K2, K16, K18







None of the four Ukrainian respondents filled out the first question in Section III of the questionnaire.

## Appendix:

Field				
code	Competency area			
K1	Occupational health and safety			
К2	Environmental protection			
К3	Risk of accidents, safeguards			
К4	Port security			
K5	Special regulations on port operating activities			
К6	Internal procedures and instructions			
К7	Port operating technologies			
К8	Technical and functional features of the device / equipment / machinery supplied			
К9	Current operation and maintenance of devices / equipment / machineries used			
	technical and functional characteristics of ships including means of equipping			
K10	them for handling and cargo designated spaces			
K11	technical characteristics and rules of operation of port constructions			
	Technical and functional features of the means of transport for internal			
K12	transports			
K13	Knowledge on the maintenance and operation of means for inland transport			
K14	Fastening and securing of cargo in the handling devices			
	Techniques for securing of goods in storage areas from the means of transport			
K15	and associated risks			
K16	Dangerous goods – characteristics, risks, regulations			
K17	Handled goods – characteristics and accompanying documents			
K18	Wastes- characteristics, risks, legal regulations			
K19	Operation of facilities for water and electricity supply on ships			
К20	Operation of facilities for the supply of ships with fuel			
K21	Cargo storage technologies			
K22	Administration of goods			
K23	Storage logistics			
K24	Passengers' terminal operation logistics			
K25	Transport and distribution logistics			
K26	Customs formalities			
K27	Ship's formalities when arriving and leaving the port			
K28	Computer skills			
К29	Economic statistics and analysis			
K30	Use of technical means of radio communication			
K31	English language			

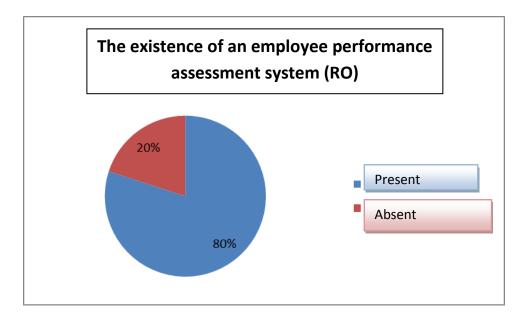






K32	Trade contracts legislation
K33	Planning and prognosis
K34	Organization of work
K35	Work standardization
K36	Services marketing
K37	Negotiation techniques
K38	Communication techniques
К39	Calculation of costs and setting of prices
K40	Quality management

2. 80% of the respondents in Romania have implemented a regular assessment system for employees in the organization. One single respondent (20%) does not have such a system of periodic assessment of employees in the organization.

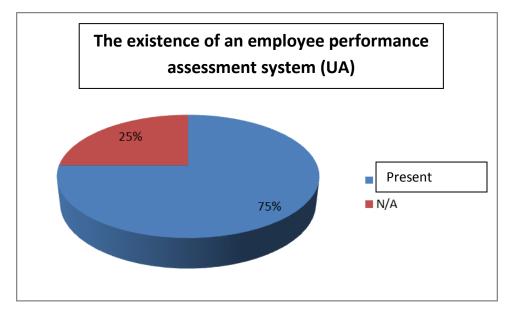


Three of the four respondents in **Ukraine** (75%) have implemented a system of periodic assessment of employees in the organization. One respondent (25%) did not give any respond to this question.

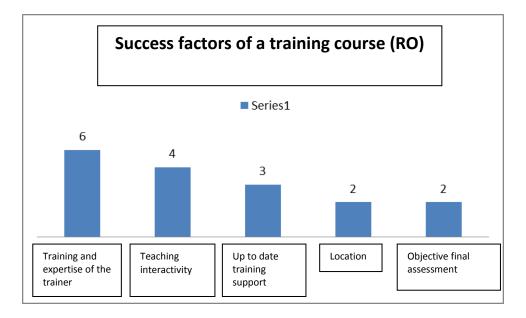








- 3. In **Romania**, the factors contributing to the success of a training and development programme/course are considered to be:
  - the training and expertise of the trainer (6 mentions- 100%)
  - the interactivity (4 mentions 70%)
  - the useful and up to date course support (3 mentions 60%)
  - the location (2 mentions 70%)
  - the final objective assessment (2 mentions 30%)



In **Ukraine**, the factors contributing to the success of a training and development programme/course are:

the interactivity (2 mentions – 50%)

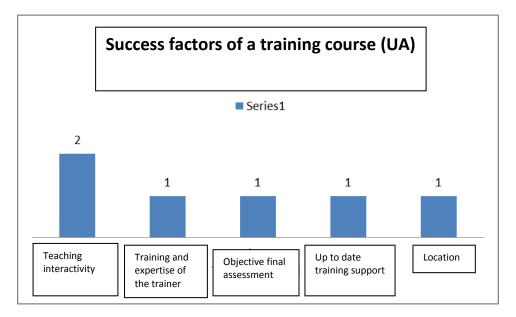






- the training and expertise of the trainer (1 mentions 25%)
- the final objective assessment (1 mentions 25%)
- the useful and up to date course support (1 mentions 25%)
- the location (1 mentions 25%)

One respondent (25%) did not respond to this question.



In the **Republic of Moldova**, the factors contributing to the success of a training and development programme/course are:

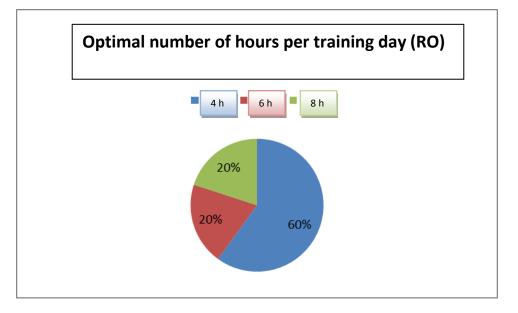
- the location
- the interactivity
- the training and expertise of the trainer
- the final objective assessment
- the useful and up to date course support
- laboratory classes equipped with appropriate equipment
- 4. The optimal amount of classes (hours) per day for a course in Romania is:
  - 4 hours (3 mentions 60%)
  - 6 hours (1 mention 20%)
  - 8 hours (1 mention 20%)





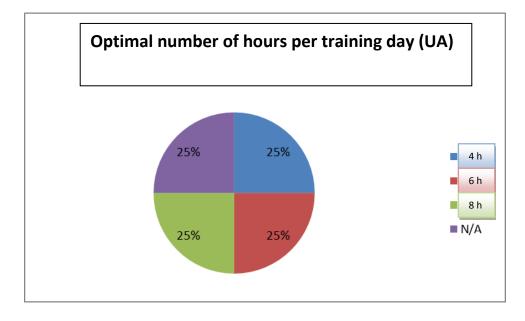


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In Ukraine, the optimal amount of hours for a day of training is:

- 4 hours (1 mention 25%)
- 6 hours (1 mention 25%)
- 8 hours (1 mention 25%)
- N/A = did not respond this question (1 mention 25%)



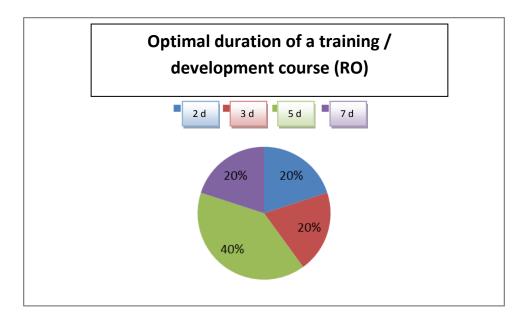






In the **Republic of Moldova**, the optimal amount of hours for a day of training is:

- 6 hours
- 5. Regarding the optimal duration of a training/development course in **Romania**, there is no consensus among the respondents, the answers received varying:
  - 2 days(1 mention 20%)
  - 3 days (1 mention 20%)
  - 5 days (2 mentions 40%)
  - 7 days (1 mention 20%)



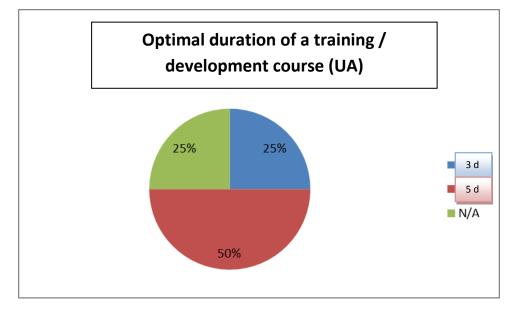
In **Ukraine**, the optimal duration of a training/development course is of:

- 3 days (1 mention 25%)
- 5 days (2 mentions 50%)
- N/A (1 mention 25%)





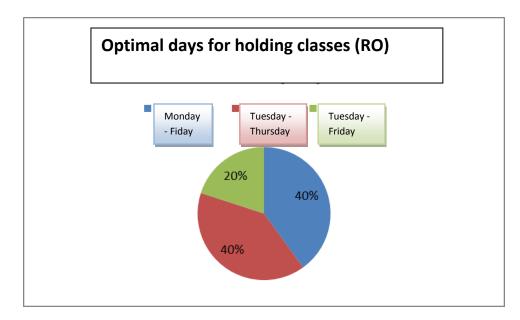




In the Republic of Moldova, the optimal duration of a training/development course is:

- Depending on the specifics of the training course
- 6. In **Romania**, the days of the week considered to be optimal for holding training/development courses are:
  - Monday Friday (2 mentions 40%)
  - Tuesday Thursday (2 mentions 40%)
  - Tuesday Friday (1 mention 20%)

All the respondents (100%) prefer to organize classes during the week.





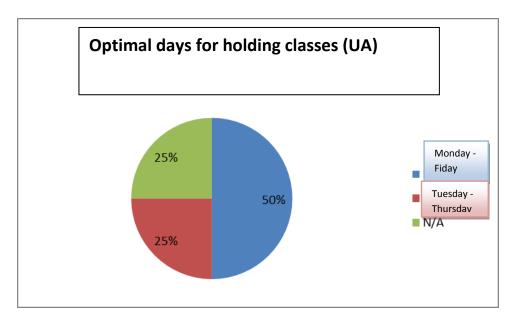




In **Ukraine**, the days of the week considered to be optimal for holding training/development courses are:

- Monday Friday (2 mentions 50%)
- Tuesday Thursday (1 mention 25%)
- N/A (1 mention 25%)

Here too, all the respondents (100%) prefer to organize classes during the week.



In the **Republic of Moldova**, the days of the week considered to be optimal for holding training/development courses are:

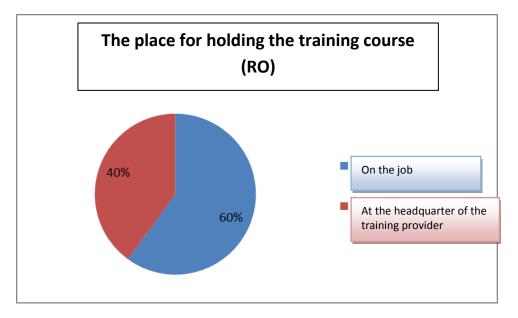
- Monday Friday
- During the week-end: Saturday Sunday
- It depends for whom the classes are intended: pupils, students or workers
- 7. In **Romania**, the place for holding the training/development classes is:
  - On the job (4 mentions 60%)
  - At the training provider headquarters (3 mentions 40%)





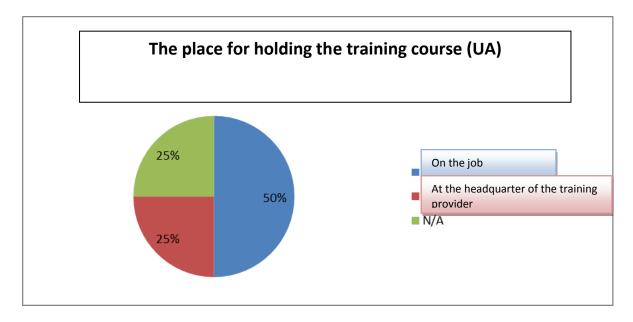


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In Ukraine, the place for holding the training/development classes is:

- On the job (2 mentions 50%)
- At the training provider headquarters (1 mention 25%)
- N/A (1 mention 25%).



In the **Republic of Moldova**, the place for holding the training/development classes is:

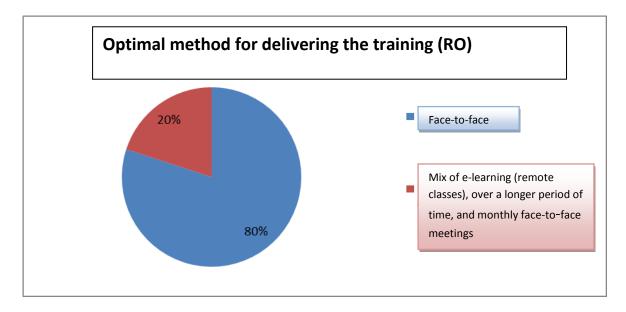
At the training provider headquarters





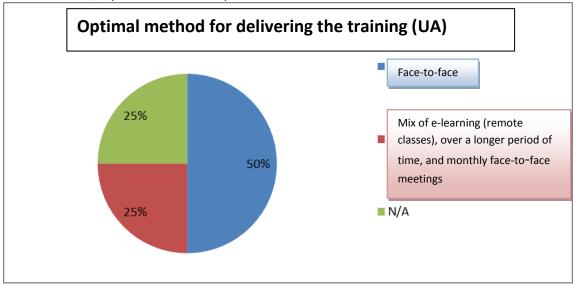


- 8. In Romania, the optimal method for delivering training/development classes is:
  - Face-to-face (4 mentions 80%)
    - Mix of e-learning (remote classes), over a longer period of time, and monthly face-to-face meetings (1 mention – 20%)



In Ukraine, the optimal method for delivering training/development classes is:

- Face-to-face (2 mentions 50%)
- Mix of e-learning (remote classes), over a longer period of time, and monthly face-to-face meetings (1 mention – 25%)



N/A (1 mention – 25%).







In the **Republic of Moldova**, the optimal method for delivering training/development classes is:

- Face-to-face
- Mix of e-learning (remote classes), over a longer period of time, and monthly face-to-face meetings

## 3.4.4. Section IV: The strategic dimension of training/development in the port sector

1. The respondents in Romania have checked the following trades for which they are aware of the existence of qualifications / training: port crane operator and stacker (6 mentions), crane-ship operator (4 mentions), port crane operator (3 mentions) and trade operator and machinist on mobile machineries for inland transports (2 mentions). The following features were mentioned only once: crane-bridge machinist, machinist on other fixed machineries for horizontal and vertical transport, trade operator, berth operator, warehouse manager, loader, storekeeper, port auto-loader driver.

In Ukraine, only 50% of the respondents (2 companies) have responded to this question. The companies have checked the following trades for which they are aware of the existence of qualifications / training: crane operator, crane bridge operator, crane-ship operator, mechanizer, head of the team of loaders, loading/unloading facilities on ship and quay operator, loader-mechanizer, port tractor driver, autotrailer driver, machinist on mobile machineries for inland transport, stacker, port autotrailer driver, port stacker, transport agent, information clerk, trade operator, berth operator, IT operator, loading-unloading supervisor, expedition documents checker, international shipper, reception operator, port stacking operator, port dispatch operator/ planner, specialty TIR and transition referent, cargo railway agent, dispatcher, invoice operator, store-keeper, bin operator, receptionist – distributor of goods and tools, product sorter, receptionist – distributor gas and diesel fuel, administrator worker.

The respondent in the Republic of Moldova did not respond to this question.







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2. The occupations for which the companies in Romania have accessed qualification / training services are: crane operator - 5 companies, stacker - 4 companies, crane-ship operator - 2 companies and the rest of occupations for which they accessed qualification services and were mentioned only once: berth operator, crane bridge machinist, port crane operator.



25% (1 company) of the respondents in Ukraine have accessed training services for the following positions: machinist on mobile machineries for inland transport, stacker, port autotrailer driver, port stacker, transport agent, information clerk, trade operator, berth operator, berth operator, loading-unloading supervisor, expedition documents checker, international shipper, reception operator, port stacking operator, port forwarding agent, port dispatch operator/ planner, specialty TIR and transition referent, cargo railway agent, dispatcher, invoice operator, store-keeper, bin operator, receptionist – distributor of goods and tools, product sorter, receptionist – distributor gas and diesel fuel, administrator worker, the other 75% of the respondents did not respond this question.

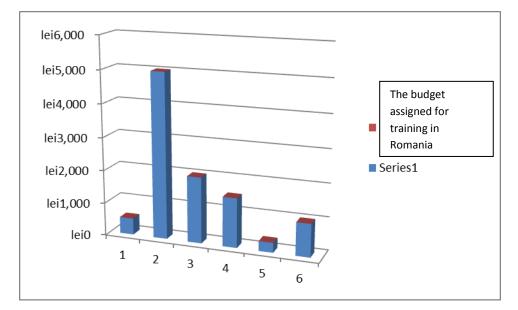
The respondent in the Republic of Moldova did not respond to this question.

3. In Romania, companies assign the following budget per year per employee training: 2 mentioned 1,000 lei / employee, the rest of the stakeholders assigning a budget between
300 lei / employee and 5000 lei / employee.









In Ukraine, only 25% of the companies have answered this question. The company assigns around 1500 – 200 UAH per year for the training of an employee.

The respondent in the Republic of Moldova did not respond to this question.

4. At the question: *Approximately, how many training courses does an employee attend per year?*, the companies from Romania gave the following response:

- 2 courses- 2 mentions
- 0 courses- 1 mention
- 1 course- 2 mentions
- 1 course per month in internal system 1 mention
- 1-2 courses 1 mention

The stakeholders in Ukraine stated that the participation of an employee in training courses during a year is the following:

- 2 courses-1 mention
- 3 courses- 1 mention

50% of the employees did not respond to this question.

The respondent in the Republic of Moldova did not respond to this question.







5. In Romania, the companies will sent the following number of employees for training next year: 3 companies will send 10 employees, the other companies will send between 2 and 5 employees, and a respondent said they are going to send 16% of their total number of employees.

In Ukraine, just 50% of the companies responded to this question. They consider they are going to send 300 employees, respectively 15 employees to attend training courses in the next 5-10 years.

The respondent in the Republic of Moldova did not respond to this question.

6. The respondents in Romania consider they need to train their employees for the following jobs over the next 5-10 years: 2 companies answered they need to send the following job categories to training: crane operator, stacker, berth operator. The following jobs have been mentioned only once: crane operator, port crane operator, crane-ship operator, machinist on mobile machineries for internal transport, lab technician for food products, crane operator, stacker, berth operator, forwarding agent, dispatchers, and LPG operators. One company did not respond.

The 50% of the respondents from Ukraine had to train the personnel for the following jobs: electrician, boiler operator, sailors, mechanic, painter, plumber, crane operator, port tractor driver, port stacker operator.

The respondent in the Republic of Moldova did not respond to this question.

7. In Romania, the companies responded that the number of employees they shall sent for training in the next 5-10 years will be of:

Name of job	Number of employees	Number of companies
Crane operator	10	3
Stacker operator	4	1
Berth operator	4	1
Port crane operator	4	1
Crane-ships operator	3	1
Machinist on mobile machineries for inland transport	3	1
Lab technician – food products analyses	3	1
LPG operators	4	1







In Ukraine only one company responded to this question, stating that it shall send a number of 2000 persons occupying various positions to training courses in the following 5-10 years.

The respondent in the Republic of Moldova did not respond to this question.

8. 70% of the companies from Romania consider that their turnover is going to increase in the next 5-10 years, while 30% of the companies said that this shall stagnate.

In Ukraine just 25% of the respondents stated that their turnover shall stagnate, while the rest of them did not respond to this question.

The respondent in the Republic of Moldova did not respond to this question.

9. The companies from Romania consider that their turnover shall increase with the following percentage:

- 20-30% 1 mention
- 15% 2 mentions
- 10% 2 mentions

No company from Ukraine responded to this question.

The respondent in the Republic of Moldova did not respond to this question.

10. 80% of the respondents from Romania listed as factors contributing to the increase, respectively stagnation of the turnover the following:

- Volume increase of handled cargo
- Increase in cargo traffic
- Cargo import and export
- Internal and external politic context
- Demand on the goods market
- Weather forecast and weather
- Investment increase to attract new cargo
- Increase of efficiency and competitiveness in cargo handling
- Increase of the tonnage of goods handled by short stationing of cargo in warehouses or direct transshipment







And 20% of them, respectively one company did not respond to this question.

None of the stakeholders from Ukraine responded to this question.

The respondent in the Republic of Moldova did not respond to this question.

## 4. Conclusions:

All workers have the right to receive an education or basic training. In ports and many other sectors of economic activities, particularly those industries that are exposed to global competition, companies now recognize the importance of investing in human capital as much as in physical capital. For the ILO (International Labour Organization), objectives of competencies development must include:

- Promoting sustainable enterprises that apply workplace practices based on compliance with the principles and fundamental rights, namely labor international standards;
- Productivity improvement which includes improving the lifestyle of workers, company's sustainability, social cohesion and economic development;
- Developing the skills and employability of people allowing them to have a better career, higher income, and companies to remain competitive and retain employees;
- Developing an effective response to the local, national and international challenges, such as technological change, globalization, climate change, environment protection and demographic change.

In ports worldwide there is a significant demand for changing the development of competencies. Work in the port sector has been transformed recently by: commercial growth, containerization and other mechanized forms of handling goods, introduction of new information technologies and communications to track the movement of goods throughout the transport chain, vertical integration of transport companies offering "door to door" services to customers, increased port activity under the control of global operators.







The vocational training programmes should be adapted to this change in labor supply and the demand for new or combined skills. There was a big change from the job analysis that was used to indicate the job skills needed to identify the competencies required for a particular function. Many of these skills are common to a large number of port functions and are indeed necessary in the entire chain of transport and logistics. Competencies can be combined to create recognized qualifications for workers in the port as part of the national framework of qualifications, but it should be stated that an approach to the sector concerned is more viable than an attempt to create a single system of education and training for all, applying to all industries.

The proposal for a system of competency-based training is not just a simple assurance that employees know how to respond to current job requirements, but to provide workers with the skills that companies require (need) today and in the near future. The competency based training is a training programme specially created that allows the learner to demonstrate its skills / competencies to perform work tasks associated with the job.