

# ONBOARD

## REPORT ON FUNCTIONAL PROFILES FOR THE APPRENTICESHIPS COURSES FOR THE PORTS AND LOGISTICS SECTOR

DESIGN OF THE  
FUNCTIONAL PROFILES  
AND JOIN CURRICULA  
FOR THE PORTS AND  
LOGISTICS SECTOR

[www.onboard-project.eu](http://www.onboard-project.eu)



Co-funded by the  
Erasmus+ Programme  
of the European Union



## Partners




<b>INOVA+</b>	<a href="https://inova.business/">https://inova.business/</a>
<b>Forum Oceano</b>	<a href="http://www.forumoceano.pt/">http://www.forumoceano.pt/</a>
<b>ISCIA</b>	<a href="http://www.iscia.edu.pt/">http://www.iscia.edu.pt/</a>
<b>CIRA</b>	<a href="http://www.regiaodeaveiro.pt/">http://www.regiaodeaveiro.pt/</a>
<b>MSE</b>	<a href="http://www.marinesoutheast.co.uk/">http://www.marinesoutheast.co.uk/</a>
<b>HALPIN</b>	<a href="http://halpin.nmci.ie/index.php?page=home">http://halpin.nmci.ie/index.php?page=home</a>

## TABLE OF CONTENTS

1	Introduction .....	1
1.1	Onboard project.....	1
1.2	Development of the profiles and curricula.....	2
1.3	The context for the definition of the level of profiles.....	3
2	Identification of needs and trends for the definition of the technical profiles .....	5
2.1	The methodological approach of the WP2.....	5
2.2	The learning needs and the gaps identified .....	6
2.2.1	Results from the surveys .....	6
2.2.2	Results from interviews .....	7
2.2.3	Results from the Focus Group.....	8
3	Development of functional profiles for apprenticeships courses for the ports and logistics sector	9
4	Relationship between the functional profiles and training needs identified .....	10
	Conclusions .....	12
	Annexes .....	13
	<b>Annex I – Functional Profile for “Technician on ports and logistics with competencies on Information Technologies” .....</b>	<b>14</b>
	<b>Annex II – Functional Profile for “Specialist Technician on Information Technology applied to ports and logistics” .....</b>	<b>18</b>



# 1 Introduction

**Functional Profiles for the apprenticeships for the Ports and Logistics Sector** (deliverable 3.1) is the first deliverable of **Design of the functional profiles and join curricula for the Ports and Logistics sector (maritime economy)** (work package 3), an output that resumes the information related to the identification of functional profiles designed in the framework of the Onboard project.

This document results from the developments achieved within the *Study on apprenticeships training needs for the ports and logistics*, in particular, the results included in **Technical profiles and training offer in ports and logistics sector: trends and needs** (deliverable 2.1) and in the **Roadmap for the development of the functional profiles and training curricula for the ports and logistics sector** (deliverable 2.2).

## 1.1 Onboard project

The Onboard project aims to **design, implement** and validate an **apprenticeship's model for ports and logistics sectors**, supporting the **development of new VET profile and curricula** and **fostering an effective cooperation structure between VET and business** of the maritime sector.

In detail, with Onboard the partnership expects to address the following challenges:

- **Promotion of the Work-Based Learning (WBL)**, by designing and providing an **apprenticeship model** for the stimulation and reinforcement of the partnerships, dialogue and cooperation between Apprenticeship's Providers (APs), SMEs and other social partners;
- **Reduction of the mismatch between the learning outcomes of the training curricula of the apprenticeship models and the labour market skills needs**, developing a **sectoral plan for the design of new technical profiles and joint curricula** for the ports and logistics sector;
- **Contribution towards the European Alliance for Apprenticeships (EAA) objectives** of **increasing the strength and quality of business-education partnerships for apprenticeships**;
- **Introduction of systematic approaches for the initial and continuous professional development of VET coordinators, trainers and tutors**, namely my designing, implementing and validating a training program for key-professionals.

With Onboard project, the consortium expects to **strengthen VET-business partnerships on apprenticeships at local and regional levels** and **setting-up and implementing new cooperation structures on sustainable VET-business partnerships**, mostly by:



- **Structuring and validating an apprenticeship model addressed to key-professionals of the apprenticeship's schemes of ports and logistics sector**, allowing them to successfully implement the training curricula and to apply the guidelines for interregional cooperation between apprenticeship's stakeholders in their organisations;
- **Designing, implementing and validating a training programme and supporting materials for the training of key-professionals of the apprenticeship scenario** (training managers, trainers, human resources managers and tutors), allowing them to successfully use and implement the apprenticeship model.

## 1.2 Development of the profiles and curricula

The initial aim of the work package 3 was to develop a structure for the design of two or three functional profile and joint curricula for the ports and logistics sector (maritime economy). Nevertheless, considering the results from the activities held during ***Study on Apprenticeships Training Needs for the Ports and Logistics*** and from fruitful discussions between partners, it was agreed that:

- Instead of developing 2/3 different functional profiles it is more relevant and suitable to design the same functional profile to achieve different European Qualification Framework (EQF) levels. By this way, the consortium will be able to cover the needs and overcome the gaps identified in the three countries.
- Functional profiles must be defined based on competencies, which means that for each level of EQF partners need to describe the knowledge, skills and attitude (soft skills), that qualification covers.
- Functional profiles and joint curricula must integrate the trends identified at European level, namely the need to develop the acquisition of digital skills, green skills and management skills, fostering the competitiveness and sustainability of the sector.

All these results are duly presented and justified in the deliverables of ***Study on Apprenticeships Training Needs for the Ports and Logistics*** (deliverable 2.1 and deliverable 2.2).

This work package was organised in three main tasks as follows:

- Task 3.1. Development of **functional profiles for apprenticeships courses** for the ports and logistics sector
- Task 3.2. Development of the **programmes/curriculums for apprenticeships courses** for the ports and logistics sector
- Task 3.3. **Validation workshop**

The present deliverable is the output related to the Task 3.1 and includes the results of the development of functional profiles for apprenticeships for the ports and logistics sector.



The document will introduce the functional profiles, using the Template accepted by partners and include:

- Identification of the functions,
- General description of the functions,
- Description of the main activities/tasks related to the functions,
- Identification of the competencies related to the function, specifying knowledge, skills and attitudes needed.

### 1.3 The context for the definition of the level of profiles

The current economic conditions provide great challenges for all sectors including ports and logistics. The constantly evolving technology requires employers to develop training giving their employees the skills needed to meet the new needs. Typically, these are occurring in the digital supply chain; the use of digital products, services and business models; and the need for data analytics.

We face the emergence of a new context with flexible and integrated value chain networks, virtualized processes, virtualized customer interface, industry collaboration as a key value-driven, where logistics has a crucial role and ports a fundamental hinge paper.

In this scenario, we cannot ignore the main role of Information Technology (IT) competencies within the ports and logistics sector. It is based on the global economic context that is established by working around IT profiles.

However, by analysing the results obtained, it is possible to highlight as the main conclusion that the apprenticeships systems offered in each country are quite different in terms of scope, levels of education, target groups and stage of implementation. These introduce some difficulties in the definition of the level of profiles, particularly in the United Kingdom, following the approval of a new scheme for apprenticeships courses.

According to an investigation conducted in Portugal (PT), United Kingdom (UK) and Ireland (IL), a consensus was achieved between partners for the definition of the two levels of profiles:

- EQF Level 4: computer technician with new training in ports, transport and logistics;
- EQF Level 5: specialist in computer science based on operations and business model of ports and logistics.

Within all partner countries, the EQF Level 4 provides an apprenticeship qualification which is of benefit to employers in the ports and logistics sector, corresponding to National Qualification Framework (NQF) Level 4 in Portugal, NQF Level 5 in Ireland and National Regulated Qualifications Framework (RQF) Level 3/4 in the United Kingdom.

EQF Level 5, however, corresponds to a trend identified for the apprenticeship scheme of ports and logistics sector in Ireland and the United Kingdom. This means that despite companies identify as a need the investment in EQF Level 4 qualification, considering the National context and evolution of



the sector in these two countries and their apprenticeship systems, it becomes clear the relevance of investing in EQF Level 5 qualification as well. So, the EQF Level 5 functional profile to be developed in this project is particularly relevant to these two countries, and it corresponds to NQF Level 6 in Ireland and RQF 4/5 in the United Kingdom.



## 2 Identification of needs and trends for the definition of the technical profiles

### 2.1 The methodological approach of the WP2

The task 2.1 performed within the ***Study on Apprenticeships Training Needs for the Ports and Logistics*** of the Onboard project, has enabled an exhaustive study on Apprenticeships' offers in ports and logistics sector in the three countries represented by the consortium, with the objective of:

- a) Identifying the skills needs of the SMEs of the ports and logistics sector with a focus on its value chains;
- b) Collecting evidence on existing training offer in the ports and logistics sector, and establishing a link between the offer and the skills needs of the labour market.

The task 2.2 *Mapping of the existing technical profiles and training offers in ports and logistics and identification of gaps* (at National and European levels) complemented the task 2.1 and its results, in which the consortium collected data concerning the existing apprenticeship's offer in each partner country, in terms of qualification profiles and curricula (T2.2).

The activities of both tasks were implemented simultaneously, and all the information, data and results achieved from tasks T2.2 and T2.3 were included in two deliverables: *D2.1 – Technical profiles and training offers in ports and logistics sector: trends and needs* and *D2.2 – Roadmap for the development of the functional profiles and training curricula for the ports and logistics sector*.

The study on apprenticeships training needs for the ports and logistics held by Onboard partners, included four main activities:

- ◆ **Develop preliminary desk research** – mostly to identify strategic documents and regional, national and European levels concerning the evolution, actual characterization, trends and needs of the ports and logistics sector in the three countries of the partnership. This desk research also included the identification of documents related to the apprenticeships' system in the countries.
- ◆ **Issued and collect of surveys** – An online survey was launch in English and Portuguese, addressed to the companies and professionals of the ports and logistics sector, to identify: companies' training policy, needs and trends of the sector, apprenticeship system and offer in the three countries and identification of functional profiles and curricula to be developed/updated for ports and logistics sector.
- ◆ **Develop and implement interviews** – involving key-experts of the sector and/or apprenticeship system or even professionals involved in other projects, mostly to understand: how can apprenticeships be included in the companies as a strategy for qualification and recruitment of young workers, main challenges that the sector is facing in terms of recruitment and training, how to strength the VET-Business cooperation in the apprenticeship system,



willing of companies investing the initial training of young workers, identification of needs of the sector in terms of functional profiles, competencies and soft skills.

- ◆ **Develop a Focus Group** – Only possible to implement in Portugal, aiming at validating the results obtained by the collection of surveys and implementation of interviews.

The results from each one these activities are presented in the D2.1 and can be complemented with the National reports developed for each country.

## 2.2 The learning needs and the gaps identified

One main conclusion that emerges from the study on apprenticeships developed in WP2 is the need to assure that the functional profiles give a suitable answer to the challenges from the industry, in what concern the learning needs and the gaps identified.

For that objective, is important to summarize the main results achieved in the different phases of the research, in particular, the competencies and skills that were recognized as essential for the development of the profiles.

### 2.2.1 Results from the surveys

From the results obtained in each country, it is possible to conclude that there are significant differences related to the needs and trends identified by companies in each country. Nevertheless, due to the evolution of the sector in terms of digitalization and the efficiency of the companies, is possible to identify as strategic skills to be developed: digital skills, green skills and management skills. By this way, managers and workers of the companies in the sector will be better prepared to face the digitalization and the need for sustainability of the sector and environment.

The results from the three countries at two levels of workers are included in Figure 1.

Levels	Technical skills	Soft skills
<b>Experienced workers</b>	<ul style="list-style-type: none"> <li>◆ Logistical space management/ warehouse operational management</li> <li>◆ Inventory management</li> <li>◆ Logistics and ports legislation (including International trading)</li> <li>◆ Health and safety at work – security and risk awareness</li> <li>◆ Shipping management</li> <li>◆ Ports management</li> </ul>	<ul style="list-style-type: none"> <li>◆ ICT skills</li> <li>◆ Communication</li> <li>◆ Interpersonal relationships</li> <li>◆ Project management</li> <li>◆ Leadership</li> <li>◆ Conflict resolution</li> <li>◆ Teamwork</li> <li>◆ Customer services</li> <li>◆ Costs control</li> </ul>
<b>Young qualified workers</b>	<ul style="list-style-type: none"> <li>◆ Knowledge of the integrated logistics/logistics chain</li> <li>◆ Sector and market knowledge</li> <li>◆ Infrastructures planning</li> <li>◆ Customs laws and International trading</li> <li>◆ Inventory/stock management</li> <li>◆ Ports management</li> </ul>	<ul style="list-style-type: none"> <li>◆ Proactivity</li> <li>◆ ICT skills</li> <li>◆ Project management</li> <li>◆ Results orientation</li> <li>◆ Leadership</li> <li>◆ Risk management</li> <li>◆ Interpersonal skills</li> <li>◆ Teamwork</li> <li>◆ Communication</li> <li>◆ Flexibility</li> <li>◆ Customer orientation</li> <li>◆ Time management</li> </ul>

Figure 1 – Competencies (technical and soft skills) identified by companies as being strategic for experienced workers and young qualified workers.

## 2.2.2 Results from interviews

From the results of the interviews conducted in the three countries, it's possible to conclude that the disruptive environment that is arising in the sector, namely associated to the need and trend of a digital revolution in the companies of the sector, may generate other challenges such as the:

- the development of workers competencies/skills for the use of IT technology (e.g. 'Single Window' Reporting, Autonomous Systems) and future use of Artificial Intelligence;
- the emergence of the use of different trade channels than conventional ones, like e-commerce, which requires an adaptation and flexibility of the companies and their workers;
- the promotion of the "logistics thinking", which implies a global vision of the all logistics value chain, and not only the point of the logistics process where the stakeholder is located;

In what concerns the competencies/skills more valued by the companies (technical versus soft skills), it becomes clear that, for the three countries, technical and soft skills are relevant.

In the case of the United Kingdom and Ireland, the need for investing in specialisation has been highlighted, along with the technical training that young adults already received from VET providers; however, from the perspective Portuguese companies, young adults already receive adequate technical training, placing a greater emphasis on investing in soft skills.

Besides technical and soft skills, some other specific skills were highlighted during the interviews as being strategic for the sector and by all countries:

- ◆ Digital Skills (e.g. digitalization; development, integration and cross-platform communication, cybersecurity, systems integration, information sharing) – due to the need and trend of the digitalization of the companies of the sector, not only as a requirement but also as a strategy to attract and retain young qualified workers in the companies.
- ◆ Green Skills (e.g. increased efficiency, speed and economy of resources, increase efficiency, reduce time and cost) – due to the legal requirements (which also demands a knowledge related to legislation) and also to the policy and commitment of the companies of the sector concerning the sustainability and environmental preservation for future generations.
- ◆ Management skills (e.g. Networking, Global Perspective of Logistics, Operational investigation, Global trade compliance) – due to the fact of the sector being in permanent change and evolution, requiring flexible management and open mind of managers of the companies.

There is no consensus between countries related to the soft skills identified by interviewees as being more relevant for the successful integration of young workers in the labour market. Nevertheless, analysing the overall results of the top 5 of the soft skills identified for the ports and logistics sector are as follows:

1. Communication
2. Teamwork
3. Proactivity
4. Positive attitude
5. Management skills



### 2.2.3 Results from the Focus Group

In what concerns the competencies for each one of the profiles selected, participants in the Focus Group<sup>1</sup> identified as more relevant to the following ones:

- **Knowledge about logistics chain**
- **Management and organization**
- **Proactivity**
- **Teamwork**
- **Project management**
- **Ports management**
- Knowledge about transport, its policies and National and International framework (Incoterms)
- **Mastering of new technologies and digital transformation of companies**
- Port business capabilities (including strategic customer retention capacity and entry into new markets)
- **Results Orientation**
- **Fluency in English**

The Focus Group largely confirmed the skills already identified in the Portuguese interviews.

---

<sup>1</sup> The Focus Group was an additional activity (not previewed in the proposal) that was possible to implement in Portugal only.



### 3 Development of functional profiles for apprenticeships courses for the ports and logistics sector

Within task 3.1. *Development of the functional profiles selected by partners*, the project will deal with the profiles approved by partners on the WP2 and identified as:

- **“Technician on ports and logistics with competencies on Information Technologies” – EQF Level 4** (see Annex I)
- **“Specialist Technician on Information Technology applied to ports and logistics” – EQF Level 5** (see Annex II).

The document will introduce the functional profiles, following the Template agreed by all partners and will include:

- Identification of the functions
- General description of the functions
- Description of the main activities/tasks related to the functions
- Identification of the competencies related to the function, specifying knowledge, skills and attitudes needed

For the proposed functional profiles, the consortium has taken into account the discussion during WP2 and followed the suggestions included in D2.2, in particular:

- The identification of the two Functional Profiles
- The option made for the ISCO code and occupation (35 – Information and communications technicians)
- The identification of the EQF Level (Level 4 and Level 5) and structure

The two functional profiles designed and structured by the consortium are included in this document as Annex I (for the functional profile EQF Level 4) and Annex II (for the functional profile EQF Level 5).

## 4 Relationship between the functional profiles and training needs identified

One main conclusion that emerged from the study on apprenticeships developed in WP2 is the need for cooperation between Business/Companies and Vocational Education and Training (VET) Institutions.

In fact, VET/Business is seen by all interviewees as needed and relevant for the competitiveness and evolution of the sector within the three countries. It is therefore essential that all countries invest in the establishment, reinforcement and strength of VET-Business cooperation and co-creation.

That's why, in the development of the profiles, it is proposed to establish a comparison between the learning needs and gaps registered from the industry and the intensity of response from the different competencies of the functional profiles proposed (knowledge, skills and attitudes).

The comparison is made in Figure 2. Both functional profiles (EQF Level 4 and EQF Level 5) were developed based in the benchmarking introduced in this table. By this way, the consortium can guarantee that the functional profiles comply with the ECVET and EQAVET principles, namely by being structured based in units of learning outcomes.



TYPE OF LEARNING NEEDS IDENTIFIED		TRAINING NEEDS AND GAPS IDENTIFIED BY THE INDUSTRY			COMPETENCE BENCHMARK IN TERMS OF UNITS OF LEARNING		
		SURVEYS	INTERVIEWS	FOCUS GROUP	KNOWLEDGE	SKILLS	ATTITUDES
TECHNICAL TRAINING NEEDS	1	Logistical space management	Global perspective of Logistics		XXX		
	2	Inventory/stocks management		Management and organizations	XXX		
	3	Logistics and ports legislation			XXX		
	4	Health and safety at work			XX		
	5	Shipping Management			XX		
	6	Ports Management		Ports management	XXX		
	7	Knowledge of integrated logistics		Knowledge about logistics chain	XXX		
	8	Sector and Market knowledge			XXX		
	9	Infrestrutures planning			XXX		
	10	Customs laws and international trading	Global Trade compliance		XXX		
	11			Knowledge about transport	XX		
IT TRAINING NEEDS	12	ICT Skills				XXX	
	13		E-commerce			XXX	
	14		Logistic Thinking			XXX	
	15		Artificial Inteligence			XX	
	16		Digitalization			XX	
	17		Cyber Security			XX	
	18		Systems integration			XX	
	19	Communication	Communication			X	
	20			Mastering of new technlogies & digital transformation		X	
SOFT SKILLS NEADS	21	Interpersonal Relationships					X
	22	Project Management	Operation investigation	Project Management			XXX
	23	Leadership					XX
	24	Conflict resolution					X
	25	Teamwork	Teamwork	Teamwork			XXX
	26	Customer services					XX
	27	Costs control	Increase efficiency; reduce time and cost				XXX
	28	Proactivity	Proactivity	Proactivity			XX
	29	Results orientation	Results orientation				XX
	30	Risk Management		Results orientation			XX
	31	Flexibility					X
	32	Customer Orientation					XX
	33	Time management					X
	34		Positive attitude				XX
	35		Management skills				XX
	36			Fluency in English			X

Figure 2 – Relationship between the Functional Profiles and the training needs and gaps identified by the Industry.

## Conclusions

The development of the design of two functional profiles for the ports and logistics sector is one of the tasks included on the Onboard project and it is the phase following the definition of the profiles and the level of the profiles.

The present document is a final version of the deliverable D3.1.

Based on the results obtained from the work in this task, we may conclude that the main objectives for the development of the functional profiles were achieved, even if there are some issues that may be clarified during the next steps.

All the questions in the evaluation will be put again in discussion and clarification during the development for the design of the join curricula the next task of this WP3.



# Annexes

**Annex I** – Functional Profile for “**Technician on ports and logistics with competencies on Information Technologies**”

**Annex II** – Functional Profile for “**Specialist Technician on Information Technology applied to ports and logistics**”





**Annex I – Functional Profile for “Technician on ports and logistics with competencies on Information Technologies”****FUNCTIONAL PROFILE****“Technician on ports and logistics with competencies on Information Technologies”<sup>2 3</sup>****EDUCATION AND TRAINING AREA: 481 – Computer use****EQF (EUROPEAN QUALIFICATION FRAMEWORK): 4****NQF (NATIONAL QUALIFICATION FRAMEWORK - IRELAND): 5****NQF (NATIONAL QUALIFICATION FRAMEWORK - PORTUGAL): 4****NQF (NATIONAL QUALIFICATION FRAMEWORK – UNITED KINGDOM): 4**

---

<sup>2</sup> ISCO: 35-Information and Communications Technicians | 351-Information and Communications Technology Operations and User Support Technicians

<sup>3</sup> The designation of the qualification will differ depending on the EQF Level.



**IDENTIFICATION OF THE QUALIFICATION**

Technician on ports and logistics with competencies on Information Technologies

**GENERAL DESCRIPTION OF THE QUALIFICATIONS:**

To perform the installation, configuration and maintenance of tools, equipment and computer systems, supported in different platforms and operating systems, and to manager database and software development, ensuring the optimization of its operation and respecting the safety, hygiene and health protection at work and environmental protection, in particular in the service of port management and logistics activities

**DESCRIPTION OF THE ACTIVITIES TO BE PERFORMED IN THIS FUNCTION.**

1. Perform the installation, configuration and maintenance of computers, peripherals, local area networks
2. Perform operating systems and utilities, according to the needs of port management and logistics activities and in order to optimize their operation;
3. Proceed with the installation, configuration and parameterization of business management applications, taking into account the installation plan, the functional requirements and the access plan appropriate to the client or service, using the appropriate software;
4. Manage databases in order to implement an information system in companies and organizations, taking into account appropriate computer systems;
5. Develop and implement Intranet and Internet systems, using hypertext, hypermedia and access to databases.

## IDENTIFICATION OF THE COMPETENCIES:

COMPETENCIES		
KNOWLEDGE	SKILLS	ATTITUDES (INCLUDING SOFT SKILLS)
<p><b>Knowledge of:</b></p> <ol style="list-style-type: none"> <li>1. Environment, safety, hygiene and health-related to professional activity.</li> <li>3. Communication and interpersonal relationships.</li> <li>4. Logistics chain.</li> <li>5. Transport, its policies and National and International framework (Incoterms).</li> <li>6. Global market and International trade.</li> <li>7. Hardware Technology.</li> <li>8. Quality and security of computer systems.</li> <li>9. Analysis of information systems.</li> <li>10. Programming languages.</li> <li>11. Web technologies.</li> <li>12. English language.</li> </ol> <p><b>In-depth knowledge of:</b></p> <ol style="list-style-type: none"> <li>13. Ports activities.</li> <li>14. Operating systems - installation, configuration and maintenance.</li> <li>15. Administrative management applications, in particular in the service of port management and logistics activities</li> <li>16. Database management systems - installation, configuration and administration.</li> <li>17. Frameworks as project management as PMBook and Scram.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify and select different appropriate computer equipment and applications.</li> <li>2. Use the equipment and technologies for computer applications according to the products to be developed.</li> <li>3. Use techniques of installation, configuration and maintenance of computers and peripherals.</li> <li>4. Use the techniques of installation, configuration and maintenance of operating systems and utilities.</li> <li>5. Use the techniques of installation and administration of local networks.</li> <li>6. Use Internet setup and configuration techniques.</li> <li>7. Use the techniques of installation, configuration and parameterization of administrative management applications.</li> <li>8. Use computing applications applied to ports and logistics.</li> <li>9. Use the techniques of analysis of information systems.</li> <li>10. Use different computer programming languages.</li> <li>11. Use the techniques of installation, configuration and administration of database management systems.</li> <li>12. Use techniques for installing and managing Web servers.</li> <li>13. Use web programming techniques.</li> <li>14. Apply the quality and security procedures of computer systems.</li> </ol>	<ol style="list-style-type: none"> <li>1. Work as a team.</li> <li>2. Demonstrate analytical ability and logical thinking.</li> <li>3. Demonstrate responsibility, initiative and autonomy.</li> <li>4. Demonstrate the ability to manage time.</li> <li>5. Demonstrate the ability to communicate.</li> <li>6. Demonstrate an ability to interpersonal relationships, particularly at the level of conflict management and motivation.</li> <li>7. Demonstrate proactivity to find appropriate solutions to solve concrete situations.</li> <li>8. Adapt to the evolution of procedures and technologies.</li> </ol>



<p>18. ITIL to effective IT and IS logistics portfolio and on-time client incident answer.</p> <p>19. Local networks - installation and administration.</p> <p>20. Internet - installation, configuration and maintenance.</p> <p>21. Web technologies as XML, Soap and web services.</p> <p>22. Servers and web programming.</p> <p>23. Audit and quality concepts and frameworks to better have development and implementations compliant with different and complex legislation in our days.</p>	<p>15. Apply the norms of environment, safety, hygiene and health in the exercise of their professional activity, as well as in the scope of port and logistics activities.</p>	
---	---	--



**Annex II – Functional Profile for “Specialist Technician on Information Technology applied to ports and logistics”****FUNCTIONAL PROFILE****“Specialist Technician on Information Technology applied to ports and logistics”<sup>4 5</sup>****EDUCATION AND TRAINING AREA: 481 – Computer use**

<b>EQF (EUROPEAN QUALIFICATION FRAMEWORK):</b>	<b>5</b>
<b>NQF (NATIONAL QUALIFICATION FRAMEWORK - IRELAND):</b>	<b>6</b>
<b>NQF (NATIONAL QUALIFICATION FRAMEWORK - PORTUGAL):</b>	<b>5</b>
<b>RQF (NATIONAL REGULATED QUALIFICATIONS FRAMEWORK - UK):</b>	<b>4/5</b>

---

<sup>4</sup> ISCO: 35-Information and Communications Technicians | 351-Information and Communications Technology Operations and User Support Technicians

<sup>5</sup> The designation of the qualification will differ depending on the EQF Level.

**IDENTIFICATION OF THE QUALIFICATION**

Specialist Technician on Information Technology applied to ports and logistics

**GENERAL DESCRIPTION OF THE QUALIFICATIONS:**

Implementing Information Technologies in companies and organizations, in particular in the service of various aspects of port management and logistics activities.

**DESCRIPTION OF THE ACTIVITIES TO BE PERFORMED IN THIS FUNCTION.**

1. Use information technology tools to support the various aspects of management, with the specific requirements for the functioning of ports and logistic activity;
2. Proceed to the planning, installation and configuration of computer systems and equipment and structured networks;
3. Participate in the design of a safe working environment for business networks, namely in the definition and implementation of coherent cyber security policies and strategies;
4. Perform management and advanced manipulation of computer systems and applications;
5. Structure and access databases;
6. Provision of content on the Internet, including using a scripting language.

## IDENTIFICATION OF THE COMPETENCIES:

COMPETENCIES		
KNOWLEDGE	SKILLS	ATTITUDES (INCLUDING SOFT SKILLS)
<p><b>Knowledge of:</b></p> <ol style="list-style-type: none"> <li>1. Mathematics.</li> <li>2. Management and organization of information.</li> <li>3. Time Management.</li> <li>4. Planning techniques.</li> <li>5. Technical English.</li> <li>6. Human resources management.</li> <li>7. Financial management.</li> <li>8. Commercial management.</li> <li>9. Purchase/supply management.</li> <li>10. Quality management.</li> <li>11. Management and manipulation of computer applications.</li> <li>12. Availability of content on the Internet.</li> </ol> <p><b>In-depth knowledge of:</b></p> <ol style="list-style-type: none"> <li>13. Logistics chain.</li> <li>14. Transport, its policies and National and International framework (Incoterms).</li> <li>15. Global market and International trade.</li> <li>16. Ports activities.</li> <li>17. Management of software applications.</li> <li>18. Frameworks as project management as PMBook and Scram.</li> </ol>	<ol style="list-style-type: none"> <li>1. Identify different types of organizational structure.</li> <li>2. Use techniques of elaboration of flowcharts, functional charts and flowcharts.</li> <li>3. Identify and use different planning techniques.</li> <li>4. Evaluate the different offers of management applications available in the market according to specific needs.</li> <li>5. Correctly handle computer applications and management support platforms.</li> <li>6. Use techniques of the configuration of the different tables of management software applications.</li> <li>7. Use reporting and preparation techniques in the various management software applications.</li> <li>8. Use techniques to perform consultation and update the databases of various computer applications.</li> <li>9. Identify and select different appropriate computer equipment and applications.</li> <li>10. Define the equipment and technologies for computer applications according to the products to be developed.</li> <li>11. Define techniques of installation, configuration and maintenance of computers and peripherals.</li> <li>12. Define techniques of installation, configuration and maintenance of operating systems and utilities.</li> <li>13. Define techniques of installation and administration of local networks.</li> <li>14. Define Internet setup and configuration techniques.</li> </ol>	<ol style="list-style-type: none"> <li>1. Work as a team.</li> <li>2. Demonstrate analytical ability and logical thinking.</li> <li>3. Demonstrate responsibility, initiative and autonomy.</li> <li>4. Demonstrate the ability to manage time.</li> <li>5. Demonstrate the ability to communicate.</li> <li>6. Demonstrate the ability to interpersonal relationships, particularly at the level of conflict management and motivation.</li> <li>7. Demonstrate proactivity to find appropriate solutions to solve concrete situations.</li> <li>8. Adapt to the evolution of procedures and technologies.</li> </ol>

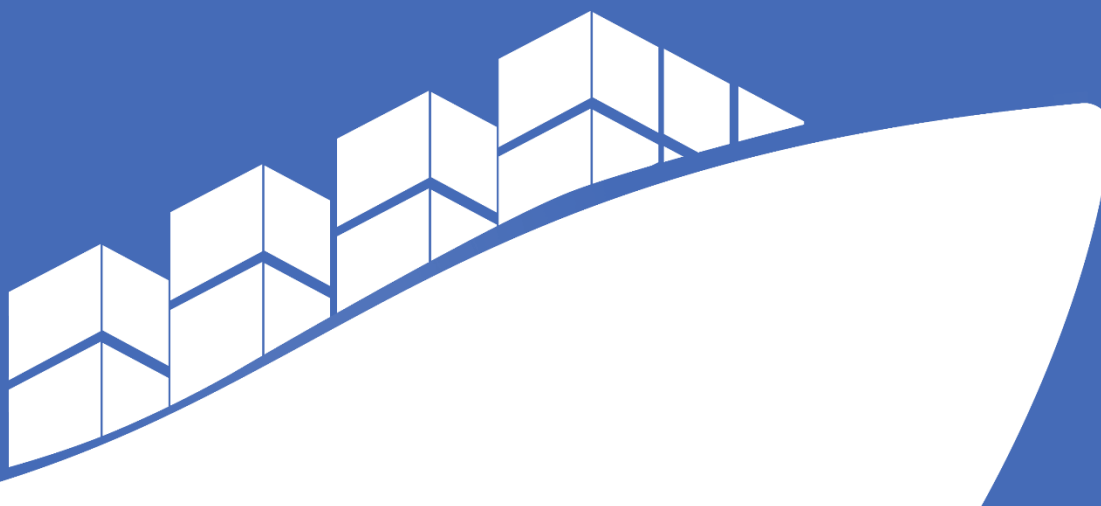
<p>19. ITIL to effective IT and IS logistics portfolio and on-time client incident answer.</p> <p>20. Computer systems.</p> <p>21. Data networks.</p> <p>22. Information systems and databases.</p> <p>23. Web technologies as XML, Soap and web services.</p> <p>24. Programming languages.</p> <p>25. Audit and quality concepts and frameworks to better have development and implementations compliant with different and complex legislation in our days.</p>	<p>15. Define techniques of installation, configuration and parameterization of administrative management applications.</p> <p>16. Evaluate computing applications applied to ports and logistics.</p> <p>9. Evaluate techniques of analysis of information systems.</p> <p>10. Use different computer programming languages.</p> <p>11. Use the techniques of installation, configuration and administration of database management systems.</p> <p>12. Use techniques for installing and managing Web servers.</p> <p>13. Use web programming techniques.</p> <p>14. Apply the quality and security procedures of computer systems.</p> <p>15. Apply the norms of environment, safety, hygiene and health in the exercise of their professional activity, as well as in the scope of port and logistics activities.</p>	
--	---	--





# ONBOARD

[www.onboard-project.eu](http://www.onboard-project.eu)



Co-funded by the  
Erasmus+ Programme  
of the European Union

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Project N°: 585208-EPP-1-2017-1-PT-EPPKA3-VET-APPREN