European Maritime and Fisheries Fund

Project: 863713-MarLEM

Maritime Logistics Engineering and Management

"God is in the Details" Ludwig Mies van der Rohe (1886–1969).

Training Plan

Deliverable 4.1. - Training Plan

Version 1.0

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Terms and Definitions

21st Century skills

A blend of content knowledge, specific skills, expertise and literacies which students need to master to succeed in work and life.

Assessment

The method of determining if a training need exists and, if it does, what training is required to fill the gap.

Behaviour change

Any modification in behaviour altering the way you act and react. The change may happen spontaneously and involuntarily without any intervention, or it may be systematic and prompted by conditioning.

Blue Growth

European long-term strategy to support sustainable growth in the marine and maritime sectors as a whole. Seas and oceans are drivers for the European economy and have great potential for innovation and growth.

Capacity building

Long-term, continuing process, in which all stakeholders participate (ministries, local authorities, non-governmental organizations and water user groups, professional associations, academics and others). In 1991 it was defined as a) the creation of an enabling environment with appropriate policy and legal frameworks; (b) institutional development, including community participation (of women in particular); and (c) human resources development and strengthening of managerial systems.

Competency

An observable behaviour supported by specific knowledge, skills, and attitudes. Each competency has a specific result or output.

Content Analysis

A procedure for organizing narrative and qualitative data into emerging themes and concepts. Usually associated with a quantitative form of analysis in which the themes are counted or measured.

European Skills Competences and Occupations classification (ESCO)

European multilingual classification of Skills, Competences, Qualifications and Occupations. ESCO works as a dictionary, describing, identifying and classifying professional occupations, skills, and qualifications relevant for the EU labour market and education and training.

Feasibility Analysis

A cost-benefit analysis completed prior to conducting training. It is an estimate of the cost of the training weighed against the possible benefits that could be achieved if training were conducted

Formal education

Education that is institutionalised, intentional and planned through public organisations and recognised private bodies, and in their totality constitute the formal education system of a country. Formal education programmes are thus recognised as such by the relevant national education or equivalent authorities.

Gap Analysis

Also called performance analysis; identifies the difference between current performance and the desired performance.

Gender balance

This term refers to the equal participation and human resources for women and men in all areas of work, projects or programmes.

Governance

It is the establishment of policies and continuous monitoring of their proper implementation, by the members of the governing body of an organization.

Interested party / stakeholder

person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity.

Interview

The process of asking questions to experts or performers to identify training needs.

Job Analysis

The process of identifying all the parts of a specific job; conducted before a task analysis.

Learning Objectives

Describes a specific behaviour, conditions, level of achievement and is written from the learner's point of view.

Needs Assessment

Gathering of information about a specific work need that can be resolved by training. The types of needs assessment include performance analysis, target population analysis, sorting training needs and wants, job analysis, and task analysis.

Needs versus Wants Analysis

Discovers training needs that are related to the organization's work. Training is linked to the final outcome and providing appropriate training will benefit the individual as well as the organization.

Ocean literacy

The understanding of the ocean´s influence on you and your influence on the ocean.

Organization

Person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives.

Paradigm

Example or pattern; an outstandingly clear or typical example or archetype.

Paradigm shifters

Elements of fundamental changes in the basic concepts and experimental practices of a scientific discipline.

Pilot Experiences

Planned actions to test the addressing of Skills and Competence gaps.

Performance Analysis

Also known as gap analysis. Performance analysis looks at an official's current performance and identifies whether the official is performing as desired

Performance Deficiency

A difference with a negative connotation, implying that the official is not meeting a known standard for performance.

Requirement

Need or expectation that is stated, generally implied or obligatory.

Skill

The ability to do an activity or job well, especially because you have done it many times

Skills ecosystem

Clusters of high, intermediate or low-level competencies in a particular region or industry shaped by interlocking networks of firms, markets or institutions.

Skills shortage

Refers to a useful understanding of what skills are in demand or may be in demand in the future for a particular job.

Target Population

The individual or group involved in a needs assessment or training program.

Task Analysis

Finds the best method and sequence of steps to complete a specific task.

Trainer

A term used in a corporate setting for a teacher. Also instructor.

Training Needs Analysis (TNA)

The process of identifying the gap between present training and needs of training. Training needs analysis is the first stage in the training process and involves a series of steps that reveal whether training will help to solve problem which has been identified.

VET Standards

This term refers to the key elements of lifelong learning systems equipping people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market. It responds to the needs of the economy but also provides learners with skills for personal development and active citizenship. VET contributes to enterprise performance, competitiveness, research and innovation and is central to employment and social policy.

Vocational Education Training (VET)

Sometimes simply known as vocational training, it is the training in skills and teaching of knowledge related to a specific trade, occupation or vocation in which the student or employee wishes to participate. Vocational education may be undertaken at an educational institution, as part of secondary or tertiary education, or may be part of initial training during employment, for example as an apprentice, or as a combination of formal education and workplace learning.

Acronyms and Abbreviations

A3ES – Agência de Acreditação e Avaliação do Ensino Superior

DGAM – Direção Geral da Autoridade Marítima

DGPM – Direção Geral da Política do Mar

DGRM – Direção Geral dos Recursos Marítimos

EC – European Commission

EASME – European Agency for Small and Medium Enterprises

EMFF – European Maritime Fisheries Fund

ENQA – European Network on Quality Assurance

ISO – International Standards Organization

MarLEM – Maritime Logistics Engineering and Management

MML - Master in Maritime Logistics

SOLE – Society of Logistics Engineering

TNA – Training Needs Analysis

History of Changes

Table 1 - History of changes

Version	Publication date	Changes
1.0	22.02.2021	Initial version
2.0	24.02.2021	Approved version to be shared and publicised

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Deliverable – D4.1 – Training plan

Work package: Wp4 – Training Planning

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Author(s): Helena Carvalho and Augusto Carreira (UNL).

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Executive Summary

Objective

This report documents the guidelines and major criteria to support the development of the training plans and associated support means. The training plans are expected to be developed and carried out by the entities that will be delivering the education and training of the Master Degree curriculum designed in the previous work package and reported in deliverable D3.2 - Report on Training Specification/Proposed Master Course.

Scope

This deliverable, D4.1 – Training Plan, is related to Tasks 4.1 – Plan Development and 4.2 – Training Support.

The Plan Development task addresses the guidelines and major criteria for the development of the training plans that will be implemented by the training provider to carry out the Master Degree curriculum.

The Training Support task addresses:

- The material needs of the curriculum delivery (tools, equipment, software, documentation and eventually accommodation for teachers and students),
- The provision of the opportunities for the students to exercise their acquired competences (internships, projects in companies or other organizations), and
- The feedback on student performance in projects and internships.

This deliverable encompasses the planning framework required for the training plans and training support. As such, this Training Plan can be regarded as the master blueprint to be used by the education institutions to develop the planning to deliver the MarLEM Master Curriculum. It should then make the development of the training plan as effortless as

possible. Hopefully, its execution – the teaching of the Master degree curriculum – will also be made easy, namely the first editions, that are usually prone to unexpected issues.

In another perspective, higher education organizations are putting in place quality management systems. International Standard ISO 21001 establishes a framework for their management systems (EOMS – Educational Organization Management System). This training plan eventually enables higher education organizations to implement a starting instance of a EOMS to deliver this Master Curriculum.

1 Introduction

The guidelines and major criteria for the development of the training plans and the training support build on top of the deliverables of WP3 – Training Design, i.e., the Report on Methods, Constraints and Criteria (D3.1) and the Report on Training Specification/Proposed Master Course (D3.2).

The regulatory and associated timing requirements, namely concerning curriculum accreditation, and the criterium on target group in D3.1, opened the opportunity to design a two semester Master Degree programme aiming at professionals only, whose design is specified in deliverable D3.2.

This report takes a masterplan-like approach for the proposed Master in Maritime Logistics (MML) curriculum, which can be adapted as effortless as possible to be delivered by the MarLEM academic partners in the different locations, with as much involvement of all partners as possible. The first instantiation of the Master's curriculum, developed by FCT NOVA and the Portuguese Navy Academy, and now undergoing accreditation in Portugal, is used as testbed and is mentioned in this document whenever deemed appropriate.

The design of the MML encompasses nine courses delivered in a first semester followed by a professional internship with a final report, the realization of a project in a real-life work environment or a dissertation[1]. The main characteristics of the curriculum are:

[1] *The first instantiation of the MML dropped the dissertation, following recommendations issued to other professional-oriented Master Degree curricula by A3ES, the Portuguese accreditation agency for higher education.*

- Courses organized in multiples of 3 ECTS or 28 contact / teaching hours and a total workload of 84 hours, which leads to:

    1 course of 6 ECTS;

    8 courses of 3 ECTS.

- Internship/project/dissertation of 30 ECTS with 42 contact hours and a total workload of 840 hours.

2 Training Plan Guidelines and Criteria

2.1 Schedule:

- Courses are delivered as modules – all in a row for the whole of its planned duration;

    A modules approach allows teaching schedules that are more like professional life[2].

    The contents of each module follow the courses specification on *Report on Training Specification/Proposed Master Course* (D3.2), which requires the delivery methods listed on *Report on Methods, Constraints and Criteria* (D3.1) to get the best learning outcomes from the target students. The first instantiation of the curriculum blends different methods under an approach oriented to professionals, but its results can only be noticed and assessed when delivering each module, eventually adjusting the methods and their sequencing on the fly. Reports on each module and on the overall programme should be produced and made available to all academic partners to help on the ulterior instances of the programme, in line with WP8 – Follow-up.

- Modules are scheduled to be delivered based on 5 working days per 3 ECTS (28 contact hours or 5h36min on average of contact time per day).

    Several more even or more skewed schedules can be envisaged, depending on factors like the subject matters of the module, the availability of the teaching staff (faculty, external experts) and of required resources (like facilities or equipment), legal and institution issued rules, or time preferences

[2] *In addition, professionals who just seek the learning of specific skills can attend detached modules.*

of the students (e.g., personal time needs of students with parental responsibilities).

Daily start, ending and break times are also dependent on the same factors. For instance, the uniform schedule – 5h36min of daily contact time – can be timetabled as:

8h – 13h36min / 8h30min – 14h06min;

9h30 – 13h – lunch break – 14h – 16h6min, or

13h – 18h36 min / 14h – 19h36 min.

Following are a few illustrative cases of feasible module schedules.

Table 2 - Examples of 3 ECTS Modules Schedules

Timetable	Mon	Tue	Wed	Thu	Fri	Total
1	5.6	5.6	5.6	5.6	5.6	28
2	6	5.5	5.5	5.5	5.5	28
3	6	6	6	6	4	28
4	8	8	4	4	4	28
5	7	7	7	3.5	3.5	28
6	7	7	7	7	0	28
7	8	6	8	3	3	28
8	8	6	8	6	0	28
	Daily Hours					

Table 3 - Examples of 6 ECTS Modules Schedules

Timetable	Mon	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri	Total
1	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	56
2	6	6	6	6	6	6	6	6	5	3	56
3	7	7	5	7	5	7	7	6	5	0	56
4	8	6	6	8	6	6	6	6	4	0	56
5	8	6	4	6	4	8	6	4	6	4	56
	Daily Hours										

Non-contact time during a module's duration can be used for other activities not programmed for classroom, or for evaluation, like the last day on schedules 6 and 8 of Table 2 and schedules 3 and 4 on Table 3.

There may be circumstances where additional time must be considered, namely, to accommodate for student work and evaluation (work assignments, eventually with in class presentations, and exams)[3].

The modules format enables last minute changes in the timetable, on a weekly or even daily basis, if the need arises, without implicating other modules or schedules.

If the modules are delivered consecutively, with no breaks in-between, the full scholar part of the MML curriculum can be delivered in 10 consecutive business weeks.

— Sequencing of modules:

The sequence of the modules should observe the principle of prerequired knowledge or skills and should be ordered to allow for a comprehensive introduction and development of the subject matters of the curriculum. The required modules are not necessary prerequisites (in the sense that calculus in $\mathbb{R}$ is necessary to learn calculus in $\mathbb{R}^n$) but, from their learning goals and syllabuses, there are some dependencies on prior knowledge. These are listed on Table 4.

Table 4 – Module dependencies

Module	Module Name	Required modules							
1	Introduction to Maritime Logistics								
2	Maritime Business Analysis	1							
3	Operations Management								
4	Maritime Logistics	1	3						

[3] *Report D3.2 proposes two MML curriculum schedules, each with its own sequence of modules and additional time for student work and evaluation.*

5	Technology Maritime and Port Administration	1	2	3	4	6	7	*8*	*9*
6	Integrated Maritime Logistics	1	2	3	4				
7	Maritime Law	1							
8	Leadership and Team Management								
9	Intercultural Negotiation								

Modules 8-Leadership and Team Management and 9-Intercultural Negotiation can be delivered anytime within the programme schedule. However, due to their general nature, not bound by the specifics of maritime logistics, it is advisable to deliver them after at least one module that may provide a meaningful contact with the port-maritime environment and anchor those soft skills modules to this reality.

The attendance of modules 8 and 9 may also help in the learning of module 5-Maritime and Port Administration, which has a mix of hard/soft aspects.

The only module required by other modules is module 1-Introduction to Maritime Logistics and it should be the 1st module of the schedule due to its introductory nature and comprehensive scope, and the fact that it overcomes the caveat of the delivery of modules 8 and 9 after a module that allows the contact with the port-maritime environment.

The rules of precedence are then:

1 $\prec$ **2**, **3**, 7, 8, 9 $\prec$ **4**, 7, 8, 9 $\prec$ **6**, 7, 8, 9 $\prec$ **5**, 8, 9 (non-highlighted modules can be delivered in any of the categories of precedence they appear in).[4]

[4] *One of the the suggestions of module sequence in D3.2 abides by these rules: 1* $\prec$ *2* $\prec$ *3* $\prec$ *4* $\prec$ *6* $\prec$ *7* $\prec$ *5* $\prec$ *8* $\prec$ *9*

2.2 Academic staffing:

These guidelines and criteria are based on current procedures used by most higher education institutions.

- The MML programme has an Academic Coordinator per delivery institution
- Each course has a responsible academic staff member or main professor, other academic staff, internal or invited, and it is encouraged to have external industry experts.

  Although each higher education institution delivering the Master Degree curriculum will staff the programme under its own rules, it is expected that invited professors also come from higher education institutions partnering with the MarLEM project.

  External industry experts are expected to share their professional expertise, for instance through seminar-like sessions.
- Timetabling and allocation of teaching staff to the courses are constrained by their module format, with short durations and scheduling limitations.

2.3 Project, internship, and dissertation:

These guidelines and criteria are based on current procedures used by most higher education institutions:

- The higher education institution may choose to offer all the options – project, internship, and dissertation – or just a subset.

  However, due to the professional orientation of this programme, it is expected that students always have the possibility of internship.
- Current rules for projects, internships and field or research work for dissertations in force at the higher education institution delivering the Master Degree curriculum apply.
- Projects, internships, and research for dissertations take place at organizations accepted by and with a protocol, where required, with the higher education institution.

  Such organizations should be mostly industry companies involved in maritime logistics, like shipping companies, port authorities, port terminal operators,

inland transportation modes operators – rail, road, waterways, or inland logistics companies.

Other organizations may host projects, internships, or research for dissertations, like authorities (government-dependent organizations) or research centres.

— Supervision:

Internships and projects have one academic supervisor and one professional supervisor.

Dissertations may have a professional supervisor, namely, but not limited to, when field work at the external organization represents a sizeable amount of the research work.

— The three parties – student, higher education institution and hosting organization, should agree (sign) a written statement of the objectives, parties' responsibilities, required means – equipment, software, special actions and facilities or specific means for specific research activities at specific dates (e.g., seagoing actions for data gathering), etc, calendar – start-end dates and milestones, safeguards, legal obligations and other clauses deemed required by specific circumstances. A three-party version of the previously mentioned protocol usually fulfils this role.

— The schedule is based on one semester (usually 16 to 20/22 weeks)

Internships usually take 3-4 months (12-16 weeks) of professionally based work and require an academic quality report, which may require another 4 weeks.

Projects have a schedule similar to that of internships, probably with less time at the hosting organization and possibly spread over short periods

Dissertations follow the usual schedule and rules of other Master Degree programmes.

— Projects and internship reports should follow rules of public presentation and defence similar to dissertations. Both academic and industry supervisors should be part of the juries.

3 Support

The goal of the MML programme – to improve the competencies in the maritime logistics field – is two-sided:

A. Attract and retain qualified graduate candidates with professional experience[5]
B. Provide the best possible training
   as designed in D3.2, calling for the methods identified in D3.1, and planned as per Sectionabove.

There is a systemic relationship between these two sides or goals: subgoal B is a necessary condition to accomplish subgoal A (with the time delay of the delivery of the programme), which has motivating consequences to keep and improve subgoal B, in a reinforcing loop that contributes to the self-sustainment of the programme.

The MML programme constitutes a service whose delivery will achieve subgoals A and B. As such, its support, i.e., the means and activities/processes required to put it up and keep it running, can take a logistics approach, calling for human, physical, financial and information resources and their design, management and operation during the service's lifetime (as used in SOLE's definition of logistics).

Most of the means and processes to support the MML programme are usually in place at the higher education institutions, supporting current teaching and research activities. Some may require adaptations due to the module format of the courses and the outward-oriented nature of the programme. Beyond that, each institution relates with external entities, specifically the industry and the authorities, in particular those impacting maritime logistics, on its own way. Therefore, support setup may differ from institution to institution and the intent of the proposed (sub)goal/functional categories approach is to help each institution build its own support checklist.

In order to have a systematized view of the support required by the Master degree programme, the approach taken here relates subgoals with the identified functional

[5] *The first instantiation of the MML requires graduate candidates with at least 5 years of professional experience.*

categories and operational means. For the sake of classification logic and ease of reading of related functional categories and operational means, subgoal B is subdivided as subgoals

B.1. Marshal and support qualified teaching staff

B.2. Learning methods[6]

B.3. Relations with industry and authorities

B.4. Operations

Following are the subgoals, their functional categories and associated operational means, identified so far. They are intended to help in the check listing of the logistical/support process of each instantiation of the MML. This approach is summarized on Table 5.

3.1 Subgoals, functional categories and operational means

A. Attract and retain qualified graduate candidates with professional experience[7]

The specific functional categories deal with:

Screening/selection of candidates;

Mobility of non-residents in the location of the delivering institution, and

Funding support:

Operational means:

- Financial

  Funds for scholarships granted by the institution delivering the curriculum.

- Materials

  Communication materials (as per deliverable 4.2 Communication Plan);

  (Existing) academic support tools;

  Augmented with a tool for candidates screening if necessary.

- Processes

  Candidates relationship management

[6] *As per D3.1 -*

[7] *The first instantiation of the MML requires graduate candidates with at least 5 years of professional experience.*

Interact with candidates;

Accept applications;

Screen and select;

Enrol.

Funding opportunities finding and application (grants, subsidies, financing programmes like Erasmus) from public and private entities, including the industry, and of the delivering institution

Assist private entities, especially industry entities, in providing financing to students

Assist students in travel and accommodation finding.

B. Provide the best possible training

B.1. Marshal and support qualified teaching staff

- Academic faculty;
- Experts from Industry/Authorities

The specific functional categories deal with:

Mobility - non residents;

Accommodation (short-time assignments);

Research.

Operational means:

- Financial

  Funds for research and teaching updating (methods, content) granted by the institution delivering the curriculum.

- Materials

  (Existing) academic support tools;

  Tools for application to grants (usually already available).

- Processes

  Funding opportunities finding and application (grants, subsidies, financing programmes) from public and private entities, including the industry, and of the delivering institution;

  Support private entities, especially industry entities, in providing financing to faculty and sponsoring the programme and related research;

Assist in travel and accommodation finding.

B.2. Learning methods

- Classroom presentations, discussions and problem solving;
- Business Case & Role Play;
- Gamification;
- Project/Work Based Learning;
- Blended Learning.

The specific functional categories deal with:

Physical and virtual environments for content delivery and exploitation, in classroom and remotely;

Environment for student work, alone and in groups;

Environment for visiting teaching staff;

Environment for breaks;

Quality internships, work projects and research-friendly environments for dissertations.

Operational means:

- Financial

  No specific financing.

- Materials

  Classroom facilities (one or more rooms)::

  Dedicated to this programme,

  With adequate layout flexibility

  for content delivery;

  class discussions;

  teams gathering.

  Student workspace(s) for individuals and teamwork;

  Teaching staff workplaces

  Especially for visiting and other external faculty and industry/authorities experts

All workplaces and classroom(s) fitted with adequate network (cabled and WiFi) capabilities and enough electric power outlets and document scanning and printing facilities

Place for informal and social gathering during class breaks:

Eventually exclusive for students and teaching staff of the programme;

With access to refreshments (multi-drinks / coffee and snacks vending machines).

Access to restaurant facilities;

Multimedia and other technological facilities;

in classroom;

in student workplace(s);

for remote delivery and interaction.

Library facilities

Virtualized;

Local and remote access.

- Processes

Make available classroom layout;

Procurement of learning software and equipment;

Procure consumables;

Assist in personal equipment/software procurement and support (students and teaching staff);

Identify, qualify, and make agreement with hosting organizations for internships, projects and dissertation research work;

In particular,

Match hosting organizations with students:

Assist in academic administrative operations to support the specifics of the programme.

B.3. Relations with industry and authorities

The specific functional categories deal with

Qualification and mobilization of organizations

Operational means:

- Financial

  Funds for activities with the organizations.
- Materials

  Communication materials (as per deliverable 4.2 Communication Plan)

  Support tool with database capabilities.
- Processes

  Organizations relationship management;

Assist in building a fabric of relationships (aligned with the AKT – Atlantic Knowledge Triangle):

to match organizations needs with the curriculum

to obtain sponsorships and funding

to assist in work-based learning (see subgoal B.2. above)

B.4. Operations

The specific functional categories deal with

Smooth daily operations and effective response in case of peak work and outlier situations;

Technical suppor.t

Operational means

- Financial

  No specific financing.
- Materials

  Tools mentioned in the previous subgoals;

  MML processes help desk;

  Technical help desk.
- Processes

  MML help desk process;

  Processes mentioned in the previous subgoals;

  (Existing) Academic support processes;

  Administrative staff (eventually shared within the academic department heading the delivery of the MML degree);

Technical staff (probably shared within the delivering institution or department):

The need for dedicated staff may turn apparent with the development of the programme activities.

Table 5 – Support structure (subgoals, functional categories, means)

Subgoals	Functional Categories	Operational Means		
		Financial	Materials	Processes
Attract and retain qualified graduate candidates with professional experience	Screening/selection of candidates Mobility of non-residents Funding	Funds for scholarships granted by the institution	Communication materials Academic support tools Candidates screening tool (if necessary)	Candidates relationship management Find and apply to funding opportunities Assist private entities in providing financing to students Assist students in travel and accommodation finding
Marshal and support qualified teaching staff: • Academic faculty • Experts from Industry/Authorities	Mobility - non residents Accommodation Research	Funds for research and teaching updating granted by the institution	Academic support tools Tools for application to grants	Find and apply to funding opportunities Support private entities in providing financing to faculty and sponsoring the programme and related research Assist in travel and accommodation finding

Subgoals	Functional Categories	Operational Means		
		Financial	Materials	Processes
Learning methods • Classroom presentations, discussions and problem solving • Business Case & Role Play • Gamification • Project/Work Based Learning • Blended Learning	Physical and virtual environments for content delivery and exploitation Environment for student work Environment for visiting teaching staff Environment for breaks Quality internships, work projects and research-friendly environments for dissertations	No specific financing	Classroom facilities dedicated to this programme with adequate layout flexibility Student workspace(s) Teaching staff workplaces workplaces and classroom(s) fitted with adequate network energy outlets and document scanning and printing facilities Place for informal and social gathering exclusive for students and teaching staff of the programme Access to refreshments Access to restaurant facilities Multimedia and other technological facilities Library facilities	Make available classroom layout Procurement of learning software and equipment Procure consumables Assist in personal equipment/software procurement and support Identify, qualify, and make agreement with hosting organizations for internships, projects and dissertation research work • Match hosting organizations with students • Assist in academic administrative operations to support the specifics of the programme

Subgoals	Functional Categories	Operational Means		
		Financial	Materials	Processes
Relations with industry and authorities	Qualification and mobilization of organizations.	Funds for activities with the organizations	Communication materials (see deliverable 4.2 Communication Plan) Support tool with database capabilities	Organizations relationship management: Assist in building a fabric of relationships • to match organizations needs with the curriculum • to obtain sponsorships and funding • to assist in work-based learning
Operations	Smooth daily operations and effective response in case of peak work and outlier situations. Technical support	No specific financing	Tools mentioned in the previous subgoals Technical help desk	Processes mentioned in the previous subgoals Academic support processes Administrative staff Technical staff • The need for dedicated staff may turn apparent with the development the programme activities

4 Conclusions and recommendations

The planning of the Master in Maritime Logistics programme is a task of the institution delivering an instance of the curriculum that is described in document D3.2 – Training Specification. This Training Plan document takes a masterplan approach whose intent is to enable the institution to easily put in place its own plan and smoothly implement the programme.

The support aspects are somewhat less prone to a closed approach due to differences in academic support tools and relationship processes with industry and authorities that can be found among the higher education institutions that engage in the delivery of this curriculum. The proposal developed on part3has no other intent then help the institutions in identifying the support items that assures their delivering of the programme.

5 References

ISO 21001:2018(E). Educational organizations — Management systems for educational organizations — Requirements with guidance for use.

SOLE – The International Society of Logistics (2017). The Logistics Engineering Handbook (CRC Press).

MarLEM Deliverable D3.1 - Report on Methods, Constraints and Criteria

MarLEM Deliverable D3.2 - Report on Training Specification / Proposed Master Course