

Decision of the Committee for Sciences of Unibasq

on the master degree programme

“Erasmus Mundus Master of Science in Marine Environment and Resources (MER)”

offered by Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU) – (Spain)

in cooperation with University of Southampton (United Kingdom), Université de Bordeaux (France), Université de Liège (Belgium) and Universidade dos Açores (Portugal).

Based on the report of the expert panel on the 30th March 2023 the Committee for Sciences decides:

1. The master degree programme “Erasmus Mundus Master of Science in Marine Environment and Resources (MER)” offered by Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU) – (Spain) in a consortium with University of Southampton (United Kingdom), Université de Bordeaux (France), Université de Liège (Belgium) and Universidade dos Açores (Portugal) is accredited according to the criteria and procedures defined in the European Approach for Quality Assurance of Joint Programmes. The study programme complies with the requirements defined by the European Approach for Quality assurance of Joint Programmes and the European Qualifications Framework (EQF) in their current version.
2. The accreditation is given for a period of six years and is valid until 30/03/2029. The following recommendations are given for further improvement of the programme:
 1. The coordinators could make efforts in the future to try to reach a joint degree among all partners, in order to avoid the two kinds of degrees awarded by MER (joint degree and double degree) because the differences in national regulations.
 2. The implementation of dynamics that can be useful for different starting levels, so that all students can, regardless of their starting point, be involved in the classroom. The Board should make a specific follow up of this issue to avoid student frustration, always without losing the high level of teaching required for the excellence of the Erasmus Mundus Programmes.
 3. Recruiting a new Visiting Validator to continue with the verification of the achievement of the Intended Learning Outcomes and the general assessment of the quality of the programme.
 4. Looking into options to cover the aspects of ocean governance and regulatory frameworks in an integrated way in the curriculum, rather than purely rely on invited speakers.
 5. Always ascertain that the workload is evenly distributed and that it is not heavier during the first semester when students coming from abroad are still adapting to the new situation and are particularly stressed by surrounding issues.
 6. More support for students in the process of obtaining a visa and finding accommodation. In particular the delays on the visa delivery by the Embassies is common to all Erasmus Mundus Joint Master Degrees (EMJMD); thus, a further improvement of integrated work among EACEA, National Focal Points and other Consortia is suggested. Maybe additional resources could be devoted to the support services (coordinators and secretariat) already available.
 7. Clearly state on the relevant documents, without leaving doubts, the language of instruction. Learning of the local language is of course also recommended by the EMJMD regulations.
 8. Coordinators could look into potential communication channels to make information more accessible and to increase the information regarding the support services. Maybe a mentoring

programme among graduates (MER alumni network) and new students could be an option. Further use of social media could also be of interest.

9. Promoting the improvement of the language skills of the academic staff.
10. Formalizing and implementing staff exchange and encouraging participation of staff in mobility activities.
11. As further improvement, for future evaluations, instead of including the facilities' description, as an annex, the consortium could describe in detail the actual facilities involved in the course in the specific section of the Self-Evaluation Report.

With regard to the reasons for this decision the Committee refers to the attached assessment report. Unibasq would like to receive a follow-up report containing the coordinators' reactions to all recommendations within three years of its decision, i.e. by March 2026.

Iñaki Heras Saizarbitoria

Unibasq Director

Assessment report

on the Erasmus Mundus Master of Science
in Marine Environment and Resources
(MER)

offered by

Universidad del País Vasco/Euskal Herriko
Unibertsitatea (UPV/EHU)

University of Southampton (Soton)

Université de Bordeaux (UBx)

Université de Liège (LU)

Universidade dos Açores (UAc)

Review coordinated by Unibasq – Agency for Quality of the Basque
University System

Following the
European Approach on Quality Assurance for Joint Programmes

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Executive Summary

This report is issued by the panel appointed by Unibasq in the framework of the accreditation request of the Erasmus Mundus Master of Science in Marine Environment and Resources (MER) submitted by the UPV/EHU on behalf on the MER consortium:

- *Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU) - Spain*
- *University of Southampton (Soton) - UK*
- *Université de Bordeaux (UBx) - France*
- *Université de Liège (LU) -Belgium*
- *Universidade dos Açores (UAc) - Portugal*

The application concerns a joint master programme of 120 ECTS offered as a full-time two-year programme distributed in four semesters: three teaching semesters and a semester for research to elaborate a Final Master Project.

The self-assessment report, the extensive programme materials before the site visit and on site and the conversations with highly motivated delegations have provided the panel with a comprehensive view of the programme. According to the panel, who based its assessment on the standards of the European Approach for Quality Assurance of Joint Programmes, the MER programme fulfils all standards. Consequently, the panel assesses the overall quality of the programme as positive.

1. The review process

On behalf of the Erasmus Mundus Master of Science in Marine Environment and Resources (MER), the UPV/EHU, which coordinates the programme, submitted its accreditation request following the European Approach for Quality Assurance of Joint Programmes on 16 October 2022.

The panel of reviewers was appointed on 24 October 2022 with the following composition:

- Prof. Maria J Bebianno (University of Algarve, Portugal)
- Prof. St  phanie Bordenave (University of La Rochelle, France)
- Prof. Elena Fabbri (University of Bologna, Italy)
- Dr. Nicolas Pade (EMBRC-ERIC, France)
- Carme Pac  n Salvador, PhD student (University of Santiago de Compostela, Spain)

Short CV's of the panel members are provided in annex 12.1. The review process was coordinated by Eva Fern  ndez de Labastida on behalf of Unibasq. All panel members signed a statement of independence and confidentiality.

The panel based its assessment on the Standards for Quality Assurance of Joint Programmes in the European Higher Education Area (EHEA) approved by the EHEA ministers in May 2015.

The panel members studied the application documentation of the proposed programme and reported on their preliminary findings. At the preparatory meetings on 9 December 2022 and 3 January 2023, the panel discussed the preliminary findings, identified the most important issues for discussion on site and prepared the sessions with the delegations.

The site visit took place on 17 and 18 January 2023. The panel discussed with the management of the consortium and the programme, as well as with lecturers, students and graduates, international officers and labour market representatives. The schedule of the visit is available in annex 12.2. Annex 12.3 lists the materials made available by the programme either before or during the site visit.

Right after the discussions, the panel formulated its considerations and preliminary conclusions per standard. These are based on the findings

of the site visit and build on the assessment of the programme documents.

The coordinator of the review then drafted the report and circulated it to all panel members for review and feedback. The comments of the members were incorporated in a final version, which was validated by the chair on 30 March 2023. The draft report was sent to the programme coordinators for comments, but there were none.

2. Eligibility

2.1 STATUS

The institutions that offer a joint programme should be recognised as higher education institutions by the relevant authorities of their countries. Their respective national legal frameworks should enable them to participate in the joint programme and, if applicable, to award a joint degree. The institutions awarding the degree(s) should ensure that the degree(s) belong to the higher education degree systems of the countries in which they are based.

EVIDENCE

As described in the SER, the Erasmus Mundus Master of Science in Marine Environment and Resources (MER) is a joint programme focused on the marine environment, its protection, conservation and valorisation, and its interactions with marine resources and ocean services. University of Southampton, University of Bordeaux, University of Liège, University of Azores and the University of the Basque Country conceived the MER programme together with a global network of associate partners. This programme is a long-lasting venture of the MER Consortium along with, and beyond, the MER EMMC 2013-2017 (FPA2013-0237), MER+ EMJMD 2017-2022 (FPA2017-1919) and MER2030 EMJMD 2021-2026 (GA 2020 619798) Erasmus Mundus programmes. These were successors of a joint master programme starting back in 2006-2007.

The very last updates in the MER Consortium and its joint programme during the running of the MER2030 EMJMD included the promotion of University of Azores from associate to full partner in the MER Consortium and a wider conception of marine resources including overall ocean services.

MER has been jointly designed to provide graduates with common and integrated competences, skills and learning outcomes identified by the MER Consortium partners and gathered in the MER Consortium agreement (Annex 2) and related documents, as the Catalogue of courses (Annex 5). The programme runs full-time over 24 months (120 ECTS) and consists of advanced courses (90 ECTS) and a Master Thesis, with a dissertation (30 ECTS). Every student follows an individually tailored study programme, by

combining the different disciplines of the partner universities. Students can select between seven alternative mobility pathways (Figure 1 and annex 6). A full list of courses and their associated learning outcomes, credits, assessment methods, and pre-requisites are available in the Catalogue of courses (Annex 5).

The institutions delivering the programmes are recognised as higher education institutions by the authorities of their countries as stated in the SER and evidenced by the legal documents of creation of each entity provided as Annex 1. All of them can participate in the joint programme and the programme is fully integrated within the national degree catalogues of the partner universities as is described in the SER and in the Consortium agreement (Annex 2).

The SER describes that depending on the national regulations, a different kind of degree is awarded:

- Joint degree: *UPV/EHU, Soton, ULiège and UAc will award a joint degree, issued by UPV/EHU. Graduates will receive a joint degree from either UPV/EHU-Soton, UPV/EHU-ULiège, UPV/EHU-UAc, UPV/EHU-ULiège-Soton, UPV/EHU-ULiège-UAc or UPV/EHU-UAc-Soton depending on the study pathway. The Joint MSc Degree Diploma is issued by the Coordinating Partner University on behalf of all Partner Universities and signed by the authorised signatories of the Partner Universities delivering the Joint Degree, is granted by all Partner Universities in recognition of a single body of work and incorporates all logos and/or coat of arms of the Partner Universities. UPV/EHU, Soton, ULiège and UAc follow existing national regulations and procedures needed to officially register each graduate's individual Degree in their respective country.*

- Double degree: *A separate parallel Degree is issued by UBx for students following pathways including Semester 1 in UBx.*

This aspect was discussed during the interviews with the management of the partner universities and the coordinators of the programme, and even if there are efforts to deliver just one joint degree in all cases, the French regulations do not allow for it yet.

ASSESSMENT

The panel considers the institutions that offer the joint programme are recognised as higher education institutions by the relevant authorities of their countries. Their respective national legal frameworks enable them to

participate in the joint programme. Each student who successfully completes the degree programme and who has fulfilled the requirements of the applicable national legislations will receive either a joint degree (of the institutions involved in their individual pathway) or an additional double degree if they follow the pathway in the UBx (France).

The panel concludes that the standard is fulfilled and suggests that efforts could be made in the future to try to reach a joint degree among all partners.

2.2 JOINT DESIGN AND DELIVERY

The joint programme should be offered jointly, involving all cooperating institutions in the design and delivery of the programme.

EVIDENCE

As commented in the previous section, the MER programme is a long-lasting venture of the MER Consortium. This experience has contributed to create a sense of jointness/integration in the MER Consortium that is reflected in the MER programme. Evidence of this are the joint procedures and documents produced and attached as annexes and the community sense felt during the interviews.

The MER Consortium Agreement (Annex 2) explains how the programme relies on a variety of joint management bodies, procedures and practices, programme and activities. The SER describes that it was jointly designed based on a common and integrated strategy, structure, practices and activities. It also lists the joint management bodies including the Joint Programme Board (JPB), the MER Secretariat, the Joint Selection Board and the Joint MSc Thesis Examination Board. Besides, the joint structure recognizes University Academic Boards (UABs) established at the partner universities as functional management elements within the MER Consortium framework. The MER Secretariat's role is to harmonise administrative and academic matters related to visibility of the programme and global networking; student selection, recruitment, progress assessment, examination, academic recognition (e.g., joint degree), career prospects; and quality assurance assessment.

Joint procedures and practices include among others:

- Joint calendar.
- Joint process of application, selection and recruitment (Joint Selection Board).
- Mandatory student mobility scheme, including a Joint MSc Thesis Examination Board and a Joint Graduation Ceremony.
- Joint management tools and documents such as the on-line application & management tools, the student agreement, self-funded student declaration, thesis progress reports and thesis evaluation forms.
- Consensus Mark Converter tool (Annex 9) to recognise each partner university grading systems for evaluating academic achievements, transferring marks among partner universities and awarding the degree.
- Joint QA procedures (questionnaires, student assembly, etc.), supervised by the jointly appointed visiting validator, as established in the MER Consortium Agreement.
- Joint repository of partner universities' support and services (Joint Help Bench).

The MER programme has been designed to provide graduates with common and integrated competences, skills and learning outcomes identified by the MER Consortium partners and gathered in the MER Consortium Agreement (Annex 2) and related documents, as the Catalogue of courses (Annex 5).

Figure 1 shows the general structure of the MER programme and the mobility pathways available. All the students receive advanced multidisciplinary courses (oceanography, biology, chemistry, geology, management); and during semester 2 follow courses together in UPV/EHU; which largely stimulates cohesion and contributes to create the MER community. The MSc Thesis research is undertaken during semester 4 (30 ECTS) and consists of a 5-6 months research under the supervision of a PhD holder. The MSc Thesis is judged by an international Joint Examination Board approved by the MER Consortium JPB.

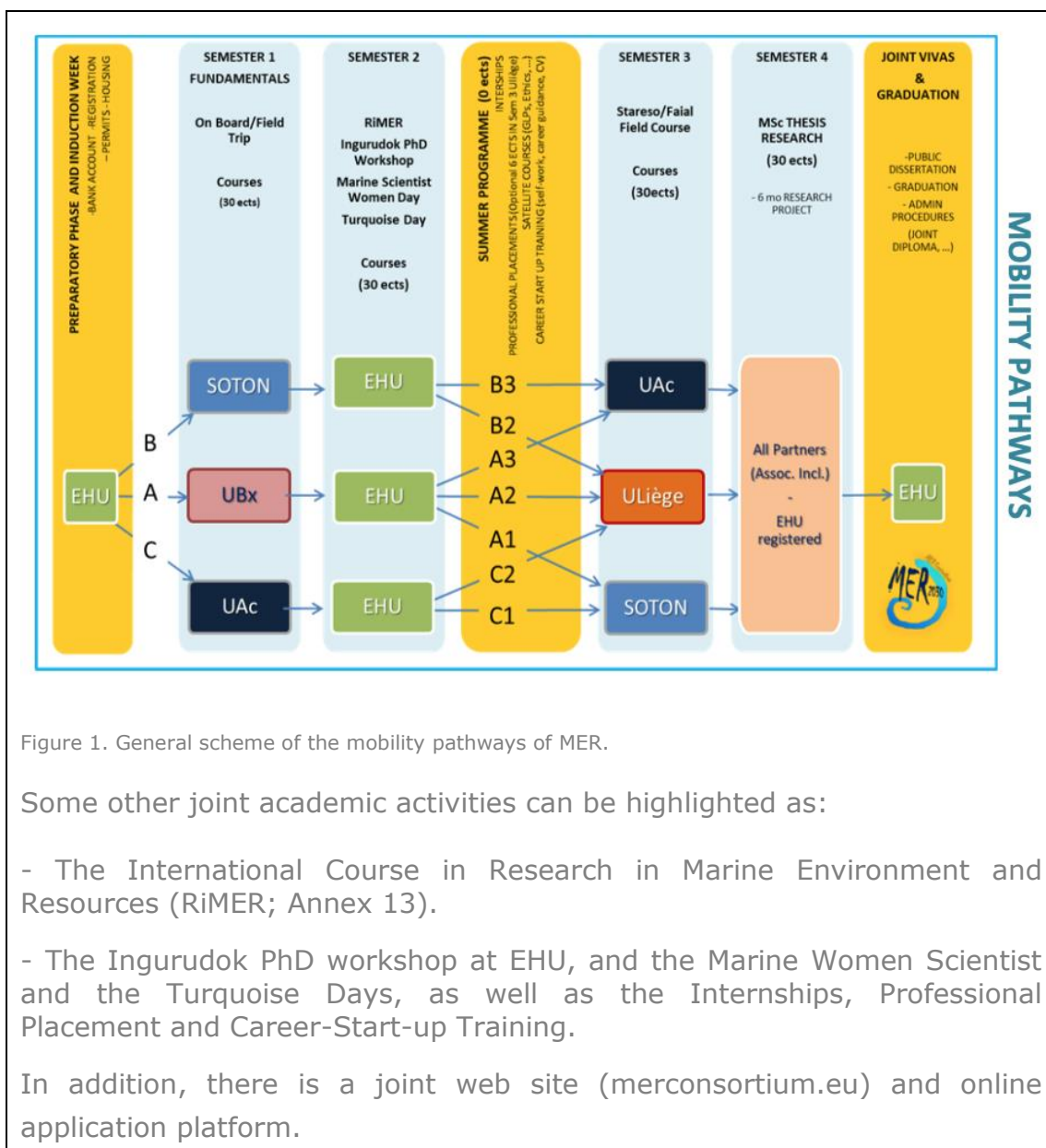


Figure 1. General scheme of the mobility pathways of MER.

Some other joint academic activities can be highlighted as:

- The International Course in Research in Marine Environment and Resources (RiMER; Annex 13).
- The Ingurudok PhD workshop at EHU, and the Marine Women Scientist and the Turquoise Days, as well as the Internships, Professional Placement and Career-Start-up Training.

In addition, there is a joint web site (merconsortium.eu) and online application platform.

ASSESSMENT

The panel considers that the programme is offered jointly, involving all cooperating institutions in the design and delivery of the programme. The panel would like to highlight the joint procedures that make this a real joint programme with an interdisciplinary approach.

The panel considers that the standard is fulfilled.

2.3 COOPERATION AGREEMENT

The terms and conditions of the joint programme should be laid down in a cooperation agreement. The agreement should in particular cover the following issues:

- Denomination of the degree(s) awarded in the programme
- Coordination and responsibilities of the partners involved regarding management and financial organisation (including funding, sharing of costs and income etc.)
- Admission and selection procedures for students
- Mobility of students and teachers
- Examination regulations, student assessment methods, recognition of credits and degree awarding procedures in the consortium.

EVIDENCE

The MER Consortium Agreement (Annex 2) covers the following issues:

- Denomination of the degree(s) awarded.
- Coordination and responsibilities of the partners involved regarding management and financial organisation.
- Admission and selection procedures for students.
- Mobility of students and teachers.
- Examination regulations, student assessment methods, recognition of credits and degree awarding procedures.

Moreover, joint management procedures, practices, academic activities and administrative rules have been agreed and are detailed in the MER Consortium Agreement. This agreement establishes that the partners (a) have overall responsibility for the academic standards and quality of the programmes delivered, and (b) recognize the equivalence of each other's QA procedures (when students are at the site of one of the partners, the relevant institutional QA protocols of this partner will apply).

According to the MER Consortium agreement, the MER Secretariat assumes the administration and day-to-day management of the overall programme, always supported by the JPB Chair and by the coordinators of the five partner universities. Main roles imply the organisation of the application/selection and enrolment procedures, as well as the management of the joint transcript of records with the marks approved by the JPB and issuing the joint degree and the corresponding EDS. However, all the partners participate in the Selection Board and in the MSc Thesis

Examination Board and the JPB meetings that approve the final marks for the whole programme.

The Consortium Agreement further explains the specific focus of each of the partners on different aspects as the organisation of the field trip to STARESO or coordinating professional placement internships (Univ. Liège) or contracting and managing the insurance for students and the organisation of the Missions of Delegates and the Turquoise Day (Univ. Bordeaux). Univ. Açores is responsible of organising the field trip to Faial Island, while Univ. Soton oversees performing the QA assessment of the progress of the programme. It also includes the specific regions for recruitment of students and scholars in which each of the institutions has more influence/contacts.

Nevertheless, the principle of shared responsibility is used for the organisation of programme-level joint activities:

- Course promotion is done via different communication and outreach tools.
- Induction is done at the start of each mobility period by the host in all the partner universities. At the start of the programme, the first week of induction is provided by the MER Consortium Secretariat.
- The "RiMER" is organised by the MER Secretariat with the contribution of the chairs of the 4 UABs and the logistic support of two associate partners (AZTI and OFG). All the university partners and many associate partners contribute with the teaching for the RiMER.

ASSESSMENT

The panel considers that the Consortium agreement covers adequately the terms and conditions to provide a joint programme. The panel considers that the standard is fulfilled.

3. Learning Outcomes

3.1 LEVEL

The intended learning outcomes should align with the corresponding level in the Framework for Qualifications in the European Higher Education Area (FQ-EHEA), as well as the applicable national qualifications framework(s).

EVIDENCE

As stated in the SER, MER *“aims at preparing students to undertake integrated, multidisciplinary research into the marine environment and its interactions with marine resources (ocean health, biodiversity conservation, sustainable resources management, pollution control and coastal zone management). Graduates will be able to integrate into multidisciplinary teams; contributing expertise in a given marine discipline or at the overlap of distinct disciplines within the field. They must be able to communicate with marine scientists and technologists of diverse expertise, facilitate communication between co-workers (e.g. between a coastal engineer and a marine biologist) and promote synergies. They must be able to accomplish transverse research (from nm/μm scale, to km phenomena/data; from sec/min scale to decades/centuries)”*.

Table 4 in the SER describes the general learning outcomes to be achieved (competences, subject specific skills and general and transferable skills). More details are given in the Catalogue of Courses (Annex 5). Annex 4 provides a matrix of correspondence of the learning outcomes with the Framework for Qualifications in the European Higher Education Area (FQ-EHEA).

ASSESSMENT

The intended learning outcomes align with the corresponding level in the Framework for Qualifications in the European Higher Education Area (FQ-EHEA). The panel considers that MER provides to students a joint structure of learning outcomes guaranteeing consistency among graduates in all key areas, while at the same time allowing students a choice between different pathways.

The panel considers that the standard is fulfilled.

3.2 DISCIPLINARY FIELDS

The intended learning outcomes should comprise knowledge, skills, and competencies in the respective disciplinary field(s).

EVIDENCE

The SER states that “*all the students receive advanced multidisciplinary courses (oceanography, biology, chemistry, geology, management) and a translational science viewpoint (from cellular and molecular biology, to large-scale processes or management)*”. The intended learning outcomes described in Table 4 and Annex 4 of the SER comprises competences, subject specific skills, general and transferable skills and soft skills in the respective disciplinary fields. The knowledge is more detailed in the learning outcomes described in each of the subjects in the Course Catalogue (Annex 5).

During the interviews with students, even if it was a small sample, certain level of frustration was perceived regarding the level of some courses by students with strong background in specific topics (for example oceanography).

ASSESSMENT

The panel considers that the MER programme consists of a suitable mix of theoretic knowledge, work experience and analytical skills, with enough flexibility allowing students to customise their own learning itinerary. However, the panel has become aware of a certain level of frustration among some students regarding the level of some basic courses depending on their previous studies. Considering that this may happen for some selected students, the committee only recommends to always ensure a high level of teaching, in line with the excellence of the Erasmus Mundus Programmes.

The panel considers that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends the implementation of dynamics that can be useful for different starting levels, so that all students can, regardless of their starting point, be involved in the classroom. The Board should make a specific follow up of this problem to avoid student frustration.

3.3 ACHIEVEMENT

The programme should be able to demonstrate that the intended learning outcomes are achieved.

EVIDENCE

The SER explains that the structure and content of the curriculum is organised to enable students to achieve the Intended Learning Outcomes (ILOs). The syllabus per course includes the aims and ILOs, as well as the details of the learning and teaching approaches, ad hoc designed to achieve the ILOs. The examination regulations and the assessment of the achieved learning outcomes are aligned with the ILOs and are applied consistently among MER Consortium partners, as detailed in the MER Consortium Agreement (Annex 2).

The achievement of the ILOs is verified at various stages:

- comparing levels and trends in marks obtained by selected students at different partner universities along the diverse mobility pathways.
- feedback provided by guest lecturers and external supervisors, including the feedback of the international Joint MSc Thesis Examination Board.
- reporting by the Visiting Validator based on the information provided by the JPB (comparative marks, feedback reports ...). Although by the time of the review the selection of a Visiting Validator was still pending.

In addition, accreditation and verification following the regulations and procedures established by national QA agencies as a part of the institutional QA procedures in force at each partner university also evidence the achievement of the ILOs.

During the site visit some master theses, with different grading were reviewed which confirmed the acquisition of the ILOs. The interviews with the labour market representatives and the graduates also evidenced that the graduates are well prepared for their careers. In addition, the coordinators explained that more than 75% of the master thesis end up in publications with high impact factors.

ASSESSMENT

The panel considers that the intended learning outcomes of the programme are effectively achieved upon graduation based on the master thesis reviewed and the interviews with the labour market representatives and the graduates.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends recruiting a new Visiting Validator to follow up the achievement of the ILOs and the general assessment of the quality of the programme.

3.4 REGULATED PROFESSIONS (Not Applicable)

If relevant for the specific joint programme, the minimum agreed training conditions specified in the European Union Directive 2005/36/EC, or relevant common trainings frameworks established under the Directive, should be taken into account.

4. Study Programme

4.1 CURRICULUM

The structure and content of the curriculum should be fit to enable the students to achieve the intended learning outcomes.

EVIDENCE

The programme runs full-time over 24 months (120 ECTS) and consists of advanced courses (90 ECTS) and a Master Thesis, with a dissertation (30 ECTS). Every student follows an individually-tailored study programme, combining the different disciplines of the partner universities:

- Advanced Oceanography and Coastal Zone Management, in UBx;
- Advanced Oceanography and Coastal and Oceanic Environments, in Soton;
- Marine Environmental Monitoring and Ecosystem Health Protection, in UPV/EHU;
- Biodiversity Conservation and Management, and Oceanic Ecosystems in ULiège; and
- Conservation and Management of Marine Resources and Ecosystems in UAc.

The coursework is arranged in six modules following the United Nations Science Decade of Sustainable outcomes namely (Figure 2):

1. Fundamentals in Ocean Science;
2. Clean Ocean;
3. Healthy and Resilient Ocean;
4. Predictable and Safe Ocean;
5. Sustainably Harvested Ocean; and
6. Ocean Scientist Career.

MODULE	COURSE	TYPE	ECTS	UNIV
FUNDAMENTALS IN OCEAN SCIENCE	Introduction to Biological Oceanography	CSS1	3,75	SOTON
	Introduction to Chemical Oceanography			
	Introduction to Marine Geology			
	Introduction to Physical Oceanography			
	Biological Oceanography	CBS1 CAS1	6	UBx UAc
	Chemical Oceanography			
	Dynamic Oceanography			
	Seafloor Geology	CLS3 CAS3	6	ULiège UAc
	Marine Ecology			
	Advanced Instrumental Analysis	OP	4	EHU
CLEAN OCEAN	Cellular and Molecular Biomarkers			
	Ecological Quality Assessment in Coastal Ecosystems			
	Environmental (toxico) Genomics			
	Environmental Analytical Chemistry			
	Environmental Chemometrics			
	Environmental Monitoring and Risk Assessment ...			
	Biology of Marine Mammals	OP	6	ULiège UAc
	Ecotoxicology and Risk Quantification of Marine Pollutants	OP	6	ULiège
	Degradation and Rehabilitation of Estuarine Ecosystems	OP	4	EHU
	Eutrophication and Harmful Algae			
HEALTHY AND RESILIENT OCEAN	Ocean Global Change Biology			
	Marine Microbial Ecology			
	Marine Resource Genomics			
	Socio-economic Aspects of Climate Change			
	Large Scale Ocean Processes	OP	7,5	SOTON
	Marine GeoArchaeology			
	Biogeochemical Cycles in the Earth system	OP	6	ULiège
	Coastal Sediment Dynamics			
	Biogeochemical Cycles in the Ocean			
	Carbon, Nutrient, Greenhouse ... and Geological Oceanography	OP	6	ULiège
PREDICTABLE AND SAFE OCEAN	Marine Plant Biology and Ecology	OP	6	UAc
	Oceans and Health	OP	6	UAc
	Applied and Marine Geophysics	OP	7,5	SOTON
	Computational Data Analysis for Geophysicists and Ocean			
	Geodynamics and Solid Earth Geophysics			
	Introductory Remote Sensing of the Oceans			
	Microfossils, Environment and Time	CBS1 CAS1	6	UBx UAc
	Analysis of Environmental Data and Modelling			
	Instrumentation ... in Operational Oceanography	OP	4	EHU
	Satellite Oceanography and Meteorology	OP	6	ULiège
SUSTAINABLY HARVESTED OCEAN	Mathematical Analysis and Modelling Methods Applied to the Environment	OP	6	ULiège
	Remote Sensing of the Oceans	OP	6	ULiège UAc
	Geographical Information Systems	OP	6	UAc
	Maritime and Coastal Spatial Planning and Law	OP	4	EHU
	Comparative Endocrinology and Endocrine Disruption...			
	Ecosystem-based Fisheries Management			
	Environment and Fisheries/Aquaculture Interactions			
	Histology and Histopathology of Aquatic Animals			
	Marine Resources Genomics	OP	7,5	SOTON
	Physiological Energetics of Marine Organisms			
OCEAN SCIENTIST CAREER	Deep Sea Ecology	OP	6	ULiège
	Marine Conservation and Policy	OP	6	UAc
	Zooplankton Ecology and Processes	OP	6	UAc
	Biochemistry and Physiology of Marine Animals	OP	6	UAc
	Functional and Molecular Marine Microbiology	OP	6	UAc
	Aquaculture and Blue Biotechnology	OP	6	UAc
	Fisheries and Fish Biology	CSS1	7,5	SOTON
	Contemporary Topics in Ocean and Earth Sciences	C	6	EHU
	Research in Marine Environment and Resources	OP	4	ULiège
	Multicultural Integration in EU	OP	6	EHU
	Marine Entrepreneurship	OP	6	ULiège
	Professional Practice in marine/envir. sectors	C	30	EHU
	Master Thesis			

Figure 2. Summary of the catalogue of courses.

The Catalogue of Courses (Annex 5) provide a full list of courses and their associated learning outcomes, associated credits, assessment methods, and pre-requisites.

Students can select between seven alternative mobility pathways as shown in Figure 1 and summarized here:

- A1 (UBx-UPV/EHU-Soton);
- A2 (UBx-UPV/EHU-ULiège);
- A3 (UBx-UPV/EHU- UAc);
- B2 (Soton-UPV/EHU-ULiège);
- B3 (Soton-UPV/EHU-UAc);
- C1 (UAc-UPV/EHU-Soton); and
- C2 (UAc-UPV/EHU-ULiège)

Regardless of the mobility pathway, all the students follow together semester 2 in UPV/EHU.

The MSc Thesis research is undertaken during Semester 4 (30 ECTS) and consists of a 5-6 months research under the supervision of a PhD holder.

During the interviews with the coordinators the following question was raised. Even if the programme argues strongly for the need of multi-disciplinary professionals, yet there does not seem to be any teaching on ocean governance, regulatory frameworks and permits. The coordinators explained that it was covered in a previous course at Soton, but this course no longer exists as the course coordinator has moved to a different institution. Now it is covered in RiMER workshop, Turquoise Day (mix of BLUE and GREEN), and is addressed by invited speakers from the United Nations with expertise in ocean governance. In addition, University of Açores adds a new course on Coastal special planning and law, which the panel considers positively.

ASSESSMENT

The panel considers that the proposed structure and content of the curriculum seem fit to enable the students to achieve the intended learning outcomes. However, the course would benefit from a better

coverage of the ocean governance and regulatory frameworks, rather than purely rely on invited speakers.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends looking into options to cover the aspects of ocean governance and regulatory frameworks in an integrated way in the curriculum, rather than purely rely on invited speakers.

4.2 CREDITS

The European Credit Transfer System (ECTS) should be applied properly and the distribution of credits should be clear.

EVIDENCE

The programme has a total study load of 120 ECTS (60 ECTS per year or 30 ECTS per semester), one credit is the equivalent to 25 hours of workload. The SER states that *"The number of ECTS points of each course were defined by the estimation of the total amount of time that a student devotes to particular course activities (weather the theoretical parts, practical assignments, experimental lab work), independent learning (through homework, projects, research papers)"* and is provided in the description of each course (Annex 5). As described in annex 5, the workload of each course varies between 3.75 and 7.5 ECTS. The workload of the MSc Thesis is 30 ECTS. The SER explains that *"the workload per semester (30 ECTS) is the consensus unit for harmonisation. All the students must follow exactly 30 ECTS per semester by combinations of courses of different workload, say: 4 courses of 7.5 ECTS (Semester 3) or 4 of 3.75 and 2 of 7.5 (Semester 1) in Soton, 5 of 6 ECTS in UBx, ULiège or UAc, with one compulsory of 6 ECTS (RiMER) and 6 optional courses of 4 ECTS in EHU. Irrespective of the combination, every semester (30 ECTS) each student will complete 15 working weeks with a maximum of 50 h per week"*.

ASSESSMENT

The panel considers that the European Credit Transfer System (ECTS) is applied properly, and the distribution of credits is clear.

The panel concludes that the standard is fulfilled.

4.3 WORKLOAD

A joint bachelor programme will typically amount to a total student workload of 180-240 ECTS-credits; a joint master programme will typically amount to 90-120 ECTS-credits and should not be less than 60 ECTS-credits at second cycle level (credit ranges according to the FQ-EHEA); for joint doctorates there is no credit range specified. The workload and the average time to complete the programme should be monitored.

EVIDENCE

The programme runs full-time over 24 months (120 ECTS) and consists of advanced courses (90 ECTS) and a Master Thesis, with a dissertation (30 ECTS). The use of ECTS by all partners makes it possible to create and document learning pathways, allowing better flexibility and comparability. The allocation of the workload among modules and course units has been jointly agreed. This guarantees that the workload is evenly distributed among all students, independently of their mobility pathways and their choice of modules available from the MER study plan (Figures 1 & 2).

The workload and the average time to complete the programme are monitored with information from several sources:

- feedback provided by student representatives at the MER JPB (at least 2 meetings per year).
- questionnaires by the students (course and mobility).
- MSc Thesis monitoring report by students and supervisors.
- Report by the visiting validator (based on the general student assembly questionnaire, the course and mobility questionnaires and the MSc Thesis monitoring reports).

During the interviews it was clear that this a demanding programme which does not allow for a part-time job, as stated by students and academic staff. The students stated that workload was particularly high during 1st and 2nd semester.

ASSESSMENT

The panel considers that the workload is evenly distributed on the 120 ECTS of the master programme. The workload and the average time to complete the programme are monitored through different means and sources of information. Nevertheless, the workload during the first two semesters should be closely monitored to avoid additional stress to new students.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends to always ascertain that the workload is evenly distributed and that it is not heavier during the first semester when students coming from abroad are still adapting to the new situation and are particularly stressed by surrounding issues.

5. Admission and Recognition

5.1. ADMISSION

The admission requirements and selection procedures should be appropriate in light of the programme's level and discipline.

EVIDENCE

The entry requirements and admission criteria for the MER programme are common for all students. Applicants will be required to complete the admission procedure, providing documents and forms available at the MER web page (www.merconsortium.eu). The admission and selection procedures are established in the Consortium Agreement (Annex 2).

The programme is open to holders of a first cycle higher education degree (Bachelor degree or equivalent) from European and third country universities in the field of engineering, geosciences, oceanography, biosciences, chemistry or environmental sciences, provided that the degree gives access to the official postgraduate programmes (EQF – Level 7) in the country where the degree was awarded. Applicants with a mother tongue other than English need to prove that they have sufficient fluency in English according to Clause 8.2. of the MER Consortium Agreement.

Specific individual requirements will be established for each applicant, according to their qualifications/prior learning, selected courses and expected academic and professional prospects. These individual requirements will be developed by the JPB (i.e. through a system of mentor assignment) for pre-registered applicants.

The decision to offer or reject applications is based on the following common admission criteria:

- study and academic merits (transcript: 20%; curriculum vitae: 20%): 40%
- motivation: 25%
- coherence and prospects: 20%
- support by external advisors (recommendation letters): 15%

The application procedure for the programme is centralised by the coordinator, which will collect the applications and make all preparations for the selection process, which is a responsibility under the JPB.

The JPB will review all applications. A mentor (appointed by the JPB) will recommend the most suitable subjects and mobility pathways for an applicant based on the information contained in the application form. The JPB will notify the applicants of its final decision to offer or reject their application based on the common admission criteria outlined above and chances of success in the Programme (possible pursuit of a PhD programme or integration in an industry research unit in the student's home country may also be considered).

The selection process will take place early enough to allow for notification of final decision in good time before the commencement of the Programme. Applicants will be admitted only when they have obtained the necessary visas, permits and insurance policies. The MER Secretariat will assist with these procedures. Wherever possible, Partners will help students through their respective International Offices. However, from the students' perspective they do not have enough support. The administrative staff were aware of this and have been working to try and facilitate processes however there is reluctance at the local administrative level to be flexible and accommodating.

All the applicants are informed of their right to appeal the decision of the Selection Board regarding their eligibility to the programme. Appeals (duly signed letters) can be submitted by email as pdf attachments to the MER Secretariat and after revision of the application documents, status and procedures the appeal is considered, and a reply is provided and the applicant is duly informed by the MER JPB Chair.

Transparency of the application, admission and selection procedures are guaranteed by the publication of the relevant information procedures.

ASSESSMENT

The panel considers that the joint admission requirements and selection procedures are appropriate considering the programme's level and discipline. However, the obtention of the visas and accommodation for 6 months for students is very complicated, which is of great concern to students.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends more support for students in the process of obtaining a visa and finding accommodation. In particular the delays on the visa delivery by the Embassies is common to all EMJMDs; thus, a further improvement of integrated work among EACEA, National Focal Points and other Consortia is suggested.

5.2. RECOGNITION

Recognition of qualifications and of periods of studies (including recognition of prior learning) should be applied in line with the Lisbon Recognition Convention and subsidiary documents.

EVIDENCE

According to the MER Consortium Agreement, each partner formally recognises the modules offered within the joint programme and the credits awarded *"The individual grades per student are communicated to the MER Consortium Secretariat and recorded in the UPV/EHU academic management system. At the same time, an integrated MER Consortium transcript will be produced and signed by the JPB Chair and submitted to the involved partner universities for their records."*

The recognition of qualifications and periods of study is handled by each university according to its own regulations.

ASSESSMENT

The panel considers that the Consortium applies fair recognition procedures to facilitate recognition of the modules and credits awarded in the partner institutions.

The panel concludes that the standard is fulfilled.

6. Learning, Teaching and Assessment

6.1 LEARNING AND TEACHING

The programme should be designed to correspond with the intended learning outcomes, and the learning and teaching approaches applied should be adequate to achieve those. The diversity of students and their needs should be respected and attended to, especially in view of potential different cultural backgrounds of the students.

EVIDENCE

MER programme is designed considering the alignment between learning outcomes, learning and teaching activities and the assessment procedures as described in the course catalogue (Annex 5).

MER Consortium partners are committed to delivering improved and effective learning and teaching practices, enhancing students' learning performance and staff professional competences. The learning and teaching approaches include conventional lectures, seminars, and laboratory and field practices, together with novel educational practices like active learning modes and new technologies.

The SER presents some examples of innovative teaching and learning methods:

- Field Courses on the Marine Ecology Module (Stareso (ULiège) or Okeanos (UAc) Marine Stations). With a Problem-Based learning (PBL) approach students learn about a subject through the experience of solving an open-ended problem found in trigger material. The aim of the PBL process is not to give a defined solution but to develop other desirable skills and attributes (i.e. knowledge acquisition, enhanced group collaboration and communication).
- On-board courses. Students at Soton (semester 1) are involved in 1 week of work during which they have hands on experience of state of the art field equipment and work in small teams on board. In the so-called "Masters Boat Week" students undertake practical work in research vessels to investigate factors influencing nutrient distribution, effect of

changing tidal cycle on physical mixing and plankton distribution in an estuary.

- RiMER. The compulsory RiMER (Research in Marine Environment and Resources) course constitutes an example of the innovation, competitiveness, visibility, cooperation with non-European universities and good practices. All the students participate in this course in the Auditorium of the Donostia-San Sebastian Aquarium (Basque Country)) for 1 week at the start of semester 2 and in the Plentzia Marine Station (UPV/EHU) for 1 week at the end of semester 2. During these courses, the students will meet more than 40 lecturers (academic and research staff from partners and associated Partners; and invited lecturers from Europe and overseas), students from the previous cohort and the MER Consortium graduates carrying out their PhD in those locations providing an opportunity to enhance communication between all. Lectures are combined with tutorials, round-table type workshops and a "cine-forum" session. During the interviews it was explained that students' participation in the discussions is promoted.

- Professional Placement traineeships. The Professional Placement allows the student to understand how knowledge acquired on the programme may be applied to solving problems in real world situations while being immersed in the working environment. Professional Placements consist of 3-4 weeks traineeships carried out in compliance of the 6 ECTS recognition requirements approved by the JPB (recognised as an optional 6 ECTS module in place of one of ULiège optional courses); it is carried out under the supervision of a professional mentor in the host organisation and an academic tutor from the partner universities. A Professional Placement agreement arranges the rights and duties of both the student and professional placement provider and detail the Activity Plan. After the traineeship, the student submits the Activity Report, and the professional mentor submits the Evaluation Report (student's performance and achievements). The academic tutor considers both reports and might have interviews with both the student and the mentor and proposes a mark to be ratified by the JPB. During the interviews the students and graduates expressed their satisfaction with the professional placements, which is a very demanded activity as confirmed by the coordinators.

Regarding the diversity of students, even if from the data and the students and graduates interviewed there is a big diversity regarding the

countries of origin, the academic staff addressed that the main differences are found because of the background education and specially the bachelor they made and sometimes there is a need to repeat basic information in some of the courses.

ASSESSMENT

The panel considers that the programme is designed considering the alignment between learning outcomes, learning and teaching activities and the assessment procedures. Although education is full-time, there are opportunities for a flexible organisation of learning, teaching and assessment activities to attend to the diversity of students. It should be considered as mentioned in 3.2 (see recommendations made) that more information to students regarding the courses and the suggested pathway based on their previous studies is made available.

The panel concludes that the standard is fulfilled.

6.2 ASSESSMENT OF STUDENTS

The examination regulations and the assessment of the achieved learning outcomes should correspond with the intended learning outcomes. They should be applied consistently among partner institutions.

EVIDENCE

As explained in the SER and confirmed during the interviews with the coordinators and the teaching staff, each university is responsible for the organisation of their courses and examinations. The partner university offering the course and hosting the student will organise examination of each course component. The JPB defines and issues a common framework for examination, related to the specified learning outcomes for each individual course as well as for the whole programme. Examination tools include for example written exams, oral exams, project report, seminars, creation of a poster, or field trip reports. The student receives feedback on all formally assessed work. Examinations are run according to local regulations, which have been laid out by the partner universities and published in the Catalogue of Courses (Annex 5). At the start of the academic year, students are informed of updates by the MER Secretariat and the corresponding UAB coordinator at the host partner university.

The student must achieve a minimum ECTS grade of E ("pass") in the coursework as a whole (Semesters 1-3; 90 ECTS), to progress to the dissertation (Semester 4).

Thesis can be presented in English, French, Spanish or Basque but in any case a second language summary must also be included. Nevertheless, during the interviews the coordinators explained that nearly all the thesis are written in English and that students are encouraged to use English in all communications. The public dissertation and the discussion will be held in the PiE-UPV/EHU the first week of September at the end of Year 2. Invited staff of international prominence participate in the Examination committees as active external examiners with thematic expertise in the corresponding research subject. Dissertation will consist of a 20 min oral presentation of the research work developed plus a questions/discussion session for additional 15 min (all in English).

The academic assessment form (Annex 9) covers the aspects which will be considered for evaluation:

- (1) Integration in the research group where the research has been carried out.
- (2) Basic skills achieved regarding the methods employed.
- (3) Ability to design and plan and carry out a research work.
- (4) Quality of the written scientific report.
- (5) Quality of the oral presentation and ability to discuss and defend each one's postulates concerning the MSc thesis.

Overall, it will be evaluated whether the candidate has achieved sufficiency for research to undertake in a next step the realisation of the PhD Thesis or a professional activity as researcher in the field of marine environment protection, conservation and valorisation. During the site visit several proofs of assessments, including master thesis, were reviewed.

ASSESSMENT

The panel considers that the examination regulations and the assessment of the achieved learning outcomes correspond with the intended learning outcomes and there are rules to be applied consistently among partner institutions. The SER (pages 20 and 33) reports that different languages

of instruction are allowed, and the thesis can be written in one of 4 languages, while English is "only" recommended. During the interviews it was clear that in fact English is the language used. This aspect is relevant for students not only during the programme delivery but also for their career as graduates.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends to clearly state on the relevant documents, without leaving doubts, the language of instruction. Learning of the local language is of course also recommended by the EMJMD regulations.

7. Student Support

The student support services should contribute to the achievement of the intended learning outcomes. They should take into account specific challenges of mobile students.

EVIDENCE

The SER describes the different support services available either joint or in each of the partner universities (<https://merconsortium.eu/services/>). Apart from the MER Consortium secretariat, there are specific international offices at each university providing support regarding administrative formalities (visas), accommodation options, language training. The information is available on the MER web site and in some guiding documents in annex 14, where detailed information about the programme and all available services is described. In addition, the students are given access to the different intranets or online platforms at each of the universities where they make their mobility pathways to have access to all the information and educational materials needed.

Nevertheless, even if the access to the information is clear, some students complain about some visa issues and accommodation difficulties, even if they are aware of the available information. The coordinators and the staff from the secretariat and the international offices explained that sometimes the expectations of students are too high regarding what they can do for them. The coordinators added that the informal communication among recent graduates and new students which is encouraged during the joint master thesis dissertations at the PIE station might be more valuable than the provided guides as the pathways are individual and each student might have their own issues for instance regarding visas.

ASSESSMENT

The panel considers that there is enough formal support for students but talking to them it seemed as if they didn't know about some of the possibilities. Maybe the coordinators could look into some ways of facilitating information in a more accessible way. The initiative of facilitating the contact with recent graduates and students during the thesis dissertations could be further promoted/formalized as a mentoring programme.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends that the coordinators look into potential communication channels to make information more accessible and to increase the information regarding the support services. Maybe a mentoring programme among graduates (MER alumni network) and new students could be an option.

8. Resources

8.1 STAFF

The staff should be sufficient and adequate (qualifications, professional and international experience) to implement the study programme.

EVIDENCE

As described in the SER and made clear in the interviews with the coordinators and the academic staff, a fundamental strength of the programme is that all partners share a common research interest with its own expertise and some synergistic overlaps.

Annex 10 shows the CVs of qualified staff to deliver the programme. Besides regular postgraduate studies, all partners have been involved in pioneering educational networks at European scale, within the field of marine and environmental sciences. Many staff involved in MER also gives lectures around Europe, within the framework of the Erasmus programme. Collaboration involving staff members from the different partners is ongoing for two decades in research, teaching and international exchanges.

During the interviews an issue was raised regarding the different English level of the academic staff depending on the partner university. This shouldn't be an issue but should be considered as an option to improve the language skills of some of the staff.

Staff have options for meeting during some of the joint activities, but it seems it is mainly the coordinators who take part. The mobility of staff (administrative staff also) could be further enhanced, and exchanges encouraged. Even if there is a clear communication and sharing of information among the partners, it would be good if apart from participating in meetings and RIMER, there could be a formalized exchange of staff.

ASSESSMENT

The panel considers that the staff is sufficient and have adequate qualifications, professional and international experience, to implement the study programme. The panel appreciates the programme's efforts to

coordinate the teaching and learning activities between the different disciplines and universities. There are options for improvement in language skills and mobility of staff should be promoted.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends promoting the improvement of the language skills of the academic staff.

The panel recommends formalizing and implementing staff exchange and encouraging participation of staff in mobility activities.

8.2 FACILITIES

The facilities provided should be sufficient and adequate in view of the intended learning outcomes.

EVIDENCE

The consortium universities have all adequate general facilities for students (campus card, libraries, computer facilities, sport centres ...). A general description of each university is provided in the SER and the specific facilities and equipment for the programme are described in annex 15 with specific links to the information. During the site visit the specific facilities of the Plentzia Marine Station (UPV/EHU) were visited. In addition, the coordinators showed some videos of the facilities in other locations.

The students and graduates were very positive about the facilities.

ASSESSMENT

The panel considers that the facilities are sufficient and adequate. During the site visit the facilities of the UPV/EHU (classrooms, laboratories,...) at the Plentzia Marine Station were visited, which were considered to be excellent. As a suggestion for further improvement, for future evaluations, instead of including the facilities' description, as an annex, the consortium could describe in detail the actual facilities involved in the course in the specific section of the SER.

The panel concludes that the standard is fulfilled.

9. Transparency and Documentation

Relevant information about the programme like admission requirements and procedures, course catalogue, examination and assessment procedures etc. should be well documented and published by taking into account specific needs of mobile students.

EVIDENCE

All relevant information about the programme like admission requirements and procedures, course catalogue, examination and assessment procedures etc. is available at the MER website.

Annex 14 shows a guide available for students with all the information about the programme and its corresponding services.

The students and graduates indicated that there is enough information available.

ASSESSMENT

The panel considers that everything relevant can be found online at the MER website.

The panel concludes that the standard is fulfilled.

10. Quality Assurance

The cooperating institutions should apply joint internal quality assurance processes in accordance with part one of the ESG.

EVIDENCE

The MER Consortium partner institutions recognise the equivalence of each other's QA procedures (when students are at the site of one of the partners, the relevant institutional QA protocols of this partner will apply) integrating some joint processes developed by the programme for internal and external evaluation:

- Periodic internal review of the programme (every 3-4 years), including external input.
- Periodic internal review of the courses (every 3- 4 years).
- Peer observation of teaching.
- Programme review prepared by UAB Coordinator for the Academic Quality & Standards Committee.
- Meetings of the JPB 2-3 times per year.
- Periodic appraisal of academic and non-academic staff.
- Visiting Validator, who produces an annual report on the programme.
- A formal course evaluation, by a high-level visiting international committee.

Some good practices to highlight are:

- Four student questionnaires (course, mobility, thesis and programme).
- The visiting validator and the reports made.
- The online questionnaire and farewell assembly (joint reflection with students), which are also sources for the report made by the visiting validator.

Annex 11 is a compilation of the questionnaires and some of the reports made.

ASSESSMENT

The cooperating institutions apply joint internal quality assurance processes, integrating the specific processes and practices of the MER programme. The panel concludes the standard is fulfilled.

11. Summary and Recommendation

11.1 SUMMARY OF RECOMMENDATIONS

1. The panel recommends the implementation of dynamics that can be useful for different starting levels, so that all students can, regardless of their starting point, be involved in the classroom. The Board should make a specific follow up of this issue to avoid student frustration.
2. The panel recommends recruiting a new Visiting Validator to continue with the verification of the achievement of the ILOs and the general assessment of the quality of the programme.
3. The panel recommends looking into options to cover the aspects of ocean governance and regulatory frameworks in an integrated way in the curriculum, rather than purely rely on invited speakers.
4. The panel recommends to always ascertain that the workload is evenly distributed and that it is not heavier during the first semester when students coming from abroad are still adapting to the new situation and are particularly stressed by surrounding issues.
5. The panel recommends more support for students in the process of obtaining a visa and finding accommodation. In particular the delays on the visa delivery by the Embassies is common to all EMJMDs; thus, a further improvement of integrated work among EACEA, National Focal Points and other Consortia is suggested.
6. The panel recommends to clearly state on the relevant documents, without leaving doubts, the language of instruction. Learning of the local language is of course also recommended by the EMJMD regulations.
7. The panel recommends that coordinators look into potential communication channels to make information more accessible and to increase the information regarding the support services. Maybe a mentoring programme among graduates (MER alumni network) and new students could be an option.
8. The panel recommends promoting the improvement of the language skills of the academic staff.

9. The panel recommends formalizing and implementing staff exchange and encouraging participation of staff in mobility activities.

11.2 RECOMMENDATION OF THE PANEL OF EXPERTS

The panel concludes that the standards are fulfilled.

12 ANNEXES

12.1 PANEL OF EXPERTS

- Prof. Maria J Bebianno (University of Algarve, Portugal) Portugal is a retired Full Professor with a PhD in Marine Ecotoxicology from the University of Reading (United Kingdom) and in Oceanography at the University of Algarve (Portugal). She was Director of the following undergraduate courses: Environmental Engineering, Oceanography, Marine Sciences and Marine and Coastal Management and member of the PhD Commission of Earth, Marine and Environmental Sciences. She is presently director of the Research Centre for Marine and Environmental Research (CIMA) and an evaluator for the Portuguese Agency for Evaluation and Accreditation of Higher Education (A3ES). At the international level she is a member of the Group of Experts of the Regular Process for the Evaluation of the State of the Marine Environment including the Socio-Economic Aspects of the United Nations. The research activity addresses the effects of traditional and emerging contaminants in the marine environment. She has published 228 papers in international journals (H index 55 (Scopus)).
- Prof. Stéphanie Bordenave (University of La Rochelle, France) Stéphanie Bordenave-Juchereau is associate professor in biochemistry at La Rochelle Université (France). She is currently involved in European University project EU CONEXUS European University for Smart Urban Coastal Sustainability, in charge of the Joint Marine Biotechnology Master. From 2016 to 2019, She managed A blue Biotechnology Master for a Blue Career, EU project funded by EMFF under grant agreement EASME/EMFF/2016.1.2.1.2/01/512.749559. The research activity is addressed to biotechnological upgrading of aquatic biomasses and their conversion into valuables and characterised bioactive compounds for human health.
- Elena Fabbri (EF) is Full Professor in Physiology at the University of Bologna (Italy). She is currently the University Delegate for Guidance of incoming and ongoing students. From 2017-2022 EF has been the European Coordinator of the Erasmus Mundus Joint Master Degree WACOMA (Water and Coastal Management). She had previously been the Coordinator for the University of Bologna of the Erasmus Mundus Joint PhD in Marine and Coastal Management (MACOMA; 2010-2017) and of the Joint Master in Water and Coastal Management (WACOMA, 2011-2016). The research activity is addressed to the signal transduction of neuromodulators and hormones correlated to the stress response; alteration of cellular functions by contaminants of emerging concern (CECs) in the marine environment (e.g. EDC, PPCPs etc); effects by CECs on cell signaling, gene and protein expression in marine vertebrates and invertebrates and use of biomarkers to assess marine organism health status.

- Dr. Nicolas Pade (EMBRC-ERIC, France) is currently the executive director of the European research infrastructure EMBRC-ERIC, dispersed across nine European countries and more than 50 research organisations. He is a molecular and behavioural biologist by background and currently coordinates two Horizon Europe projects related to marine biodiversity observation and eDNA reference libraries.
- Carme Pacín Salvador, PhD student (University of Santiago de Compostela, Spain) - Carme Pacín is a PhD candidate at the University of Santiago de Compostela (Spain). In her thesis she studies the evolution of marine pollution (heavy metals, lead isotopes, nitrogen isotopes, microplastics, nanoparticles...) using macroalgae as biomonitors. In addition, she has been collaborating for 2 years with different regional quality agencies in Spain, in processes of verification and modification of bachelor degrees, masters and doctoral programmes.

12.2 SCHEDULE OF SITE VISIT

DAY 1 (17/01/2023)

9:00 – 9:50 Management of UPV/EHU and other partners (MER and ECT+)

- *Montserrat Maritxalar (Vice-Rector Postgraduate Studies and Life-Long Learning, UPV/EHU)*
- *Fernando Plazaola (Dean Faculty of Science and Technology, UPV/EHU)*
- *Begoña Blanco (Director of QA Services, UPV/EHU)*
- *Susana Mira Leal (Rector of UAc) ONLINE*
- *Laurent Servant (Vice-president International Relations, UBx) ONLINE*
- *Julien Bois (Institutional Manager for Crossborder Relations, UPPA) ONLINE*
- *Manuel João Rua Vilanova (Subdirector ICBAS, UPO) ONLINE*
- *Chris Hauton (Director of Internationalisation for SOES, Soton) ONLINE*
- *Sylvie Gobert (Vice-Dean for Education, Fac Sci, ULiège) ONLINE*
- *Karina Mathisen (Vice-Dean Faculty of Science, NTNU) ONLINE*

10:00 – 10:50 Coordinators of MER Programme

- *Jorg Schafer (UBx)*
- *Cecilia D'Angelo (Soton)*
- *Manu Soto (UPV/EHU)*
- *Ionan Marigomez (UPV/EHU; Coord. Internac.)*
- *Sylvie Gobert (ULiège) ONLINE*
- *Patricia V. Garcia (UAc) ONLINE*

11:00 – 11:50 Students and recent graduates of MER Programme

- *Xabier Larrinaga (2022/24; UBx-EHU-ULiège)*
- *Gema Camacho (2022/24; Soton-EHU-ULiège) ONLINE*
- *Tosca Sala (2021/2023; Soton-EHU-ULiège) ONLINE*
- *Marco A Friedrichsen (2021/2023; UBx-EHU-Soton) ONLINE*
- *Valeriia Vakhitova (2021/2023; UBx-EHU-Soton) ONLINE*

- *MM Mredul (2020/2022; UBx-EHU-ULIège; EMA representative) ONLINE*
- *Joyanta Bir (2016/2018; UBx-EHU-ULIège)*

12:00 – 12:50 Teachers of MER Programme

- *Jerome Bonnin (UBx)*
- *Krishna Das (ULiège)*
- *Jon Saenz (UPV/EHU)*
- *Ikerne del Valle (UPV/EHU)*
- *Ana M Costa (UAc) ONLINE*
- *Annick Wilmotte (ULiège) ONLINE*
- *Aida A Azcarate (ULiège) ONLINE*
- *Duncan Purdie (Soton) ONLINE*

Lunch break

14:00 - 14:50 International Office and Student support team for both programmes (Support services-Administration staff) MER and ECT+

- *Feli Olivares/Jon Bazeta (MER/ECT+ Secretariat, UPV/EHU)*
- *Mónica Vitorica/María Ruigomez (Academic Management Service, UPV/EHU)*
- *Florina Camarasu (IRO, UBx)*
- *Isabelle Noirot (IRO, ULiege) ONLINE*
- *Domique Thewissen (QA Office, ULiege)*
- *Magalie Estevez (IRO, UPPA)*
- *Caroline Hanin (IRO, UPPA) ONLINE*
- *Zélia M. Gomes (Postgraduate Unit-Academic Affairs, UPO) ONLINE*
- *Sara Diana Moreira (IRO, UPO) ONLINE*
- *Maria Amélia Fonseca (Pro-Rector International Affairs; U Azores) ONLINE*
- *Daniel Bech (IRO, NTNU) ONLINE*
- *Gerd Johanne (Student Advisor; NTNU) ONLINE*

15:00 – 15:50 Labour market representatives for both programmes MER and ECT+

- *Alberto Katsumiti (Researcher GAIKER-IK4)*
- *Patrice Gonzalez (Researcher CNRS / Vice-director EPOC laboratory) ONLINE*
- *Vitor Vasconcelos (Director of CIIMAR) ONLINE*
- *Nine Doutreloux (Representative of STARESO) ONLINE*
- *Javier Franco (Researcher AZTI) ONLINE*
- *Mikel Becerro (Researcher CSIC) ONLINE*
- *Joel Knoery (Researcher IFREMER) ONLINE*

16:00 – 16:50 Students and recent graduates of the ECT+ Programme

- *Luis Mauricio Ortiz (2020/22; ULiege-UPO-EHU) ONLINE*
- *Anabella Massa (2020/22; UPPA-EHU-EHU) ONLINE*
- *Júlia Grinyó (2020/22; ULiege-NTNU-EHU) ONLINE*
- *Lizlit Cabag (2021/23; UPPA-UPO-EHU) ONLINE*
- *Kehinde Olajide (2021/23; UBx-EHU-EHU) ONLINE*
- *Yoce Aprianto (2021/23; UPPA-UPO-EHU) ONLINE*
- *Marta Del Castillo (2022/24; ULiege-NTNU-EHU) ONLINE*
- *Oluwafemi Oyekan (2022/24; UBx-EHU-EHU) ONLINE*

17:00 – Visit to the PIE premises, if relevant presentation of some other premises. Review of additional documentation.

20:00 Dinner

Day 2 (18/01/2023)

8:50 – 9:40 Coordinators of the ECT+ Programme

- *Agnés Feurtet-Mazel (UBx)*
- *Nathalie Geneste (UBx)*
- *Mathilde Monperrus (UPPA)*
- *Krishna Das (ULiege)*
- *Lúcia Guilhermino (UPO) ONLINE*
- *Eduardo Rocha (UPO) ONLINE*
- *Bjorn Munro (NTNU) ONLINE*
- *Nestor Etxebarria (UPV/EHU)*
- *Maren Ortiz-Zarragoitia (UPV/EHU; Coord. Internac.)*

9:50 – 10:40 Teachers of the ECT+ Programme

- *Beñat Zaldibar (UPV/EHU)*
- *Maitane Olivares (UPV/EHU)*
- *Marie-Lise Benot (UBx) ONLINE*
- *Eric Villenave (UBx) ONLINE*
- *Charlotte Recapet (UPPA) ONLINE*
- *Celia Joaquim-Justo (ULiege) ONLINE*
- *Vitor Manuel Vieira da Costa (UPO) ONLINE*
- *Luís Gabriel Antão Barboza (UPO) ONLINE*
- *Ase Krokje (NTNU) ONLINE*

10:50 – 11:40 Final meeting with both programmes coordinators and academic staff

Summary of the site visit and farewell.

Lunch

12.3 LIST OF REVIEWED EVIDENCE

Mandatory annexes

- 1) Documents supporting the legal status of the partner institutions (Annex 01 Legal status partners)
- 2) Cooperation agreement
(Annex 02 MER cooperation agreement 2020 and update 2022)
- 3) Documents supporting each partner's legal basis for participating in the joint programme (Annex 03 MER legal basis joint progr & degree)
- 4) List of intended learning outcomes, including Annex 04 MER matrix FQE & NQF alignment.
- 5) Course syllabi of all partners (Catalogue of Courses): Annex 05 MER catalogue of courses 2022
- 6) Structure of the curriculum / study plan / mobility scheme: Annex 06 Curriculum study plan & mobility
- 7) Official documents indicating admission requirements and selection procedures: Annex 07 EXTRACT MOU ADMISISON SELECTION
- 8) Official documents outlining procedure for recognition of qualifications: Annex 08 RECOGNITION OF QUALIFICATIONS
- 9) Students' assessments regulations and Student Agreement 09 ASSESS REGL & STUD AGREEM
- 10) Academic staff CVs (all partners) 10 STAFF CURRICULUM VITAE
- 11) Relevant documents constituting internal quality assurance system: Joint QA: Reports, Questionnaires, Vv 11 INTERNAL QA DOCUMENTS
- 12) Diploma supplement (sample) 12 MER DEGREE & EDS

Additional annexes

- 13) 13 INNOVATIVE LEARNING CAREER SUPORT INTERNSHIPS RiMER, TQS Day, MWSD, Field Courses, Professional Placement
- 14) Student support and integration

- 15) 15 MER FACILTIES & EQUIP EXAMPLS
- 16) MER EMJMD summ indicators
- 17) Videos of facilities and activities
- 18) Master thesis samples