Expert Panel Report

Joint doctoral study programme
Marine and Maritime Sciences
and Technologies

The University of Split (UNIST) as the coordinating institution within the European University of the SEAS (SEA-EU) Alliance: The University of Cadiz, The University of Western Brittany, The University of Malta, The University of Naples Parthenope, The University of Algarve and The Nord University

April 2025

agency for science and higher education croatia

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Glossary

ASHE – Croatian Agency for Science and Higher Education

EQAR – The European Quality Assurance Register for Higher Education

EQF – The European Qualifications Framework

DEQAR – The Database of External Quality Assurance Results

ImpEA – Erasmus+ Strategic Partnership Project "Facilitating Implementation of the European Approach for the Quality Assurance of Joint Programs"

QF EHEA - the Framework for Qualifications of the European Higher Education Area

The Consortium – The Consortium of institutions that are delivering the joint study programme is consisting of the seven universities: University of Split (Republic of Croatia), University of Cádiz (Kingdom of Spain), University of Western Brittany (Republic of France), University of Malta (Republic of Malta), University of Naples Parthenope (Republic of Italy), University of Algarve (Republic of Portugal) and Nord University (Kingdom of Norway).

The European Approach for Quality Assurance of Joint Programs - Procedure for External Quality Assurance of Joint Programs in the EHEA, adopted by the Ministers of the European Higher Education Area in Yerevan on 14-15 May 2015.

SEA-EU Alliance – association of nine universities (University of Split, University of Cádiz, University of Western Brittany, University of Malta, NORD University, University of Naples Parthenope, University of Algarve, University of Gdańsk and Kiel Univeristy).

General information

BASIC INFORMATION ABOUT THE PROCEDURE

This Report has been written by the Expert Panel appointed by the Accreditation Council of the Agency for Science and Higher Education (ASHE) with the aim of carrying out the accreditation procedure of the joint doctoral study program *Marine and Maritime Sciences and Technologies*[1] based on the procedural principles and standards of the European Approach, as explained in detail under the framework of the ImpEA project. The joint doctoral study program has been developed by the Consortium consisting of the: University of Split, Split, Republic of Croatia, University of Cádiz (Kingdom of Spain), University of Western Brittany (Republic of France), University of Malta (Republic of Malta), University of Naples Parthenope (Republic of Italy), University of Algarve (Republic of Portugal) and Nord University (Kingdom of Norway). The doctoral joint study degree will be awarded as joint doctoral degree in Marine and Maritime Sciences and Technologies.

It is proposed of the level 8 of the European Qualifications Framework and corresponds to the third cycle in the Framework for Qualifications of the European Higher Education Area (QF EHEA), as well as their corresponding levels at the national qualification frameworks of Republic of Croatia, Kingdom of Spain, Republic of France, Republic of Malta, Republic of Italy, Republic of Portugal and Kingdom of Norway.

Before the visit, the ASHE contacted all national agencies which accredited the universities of the consortium and communicated the necessary information about the initiated accreditation procedure of the joint doctoral study programme as about the potential recognition of the joint diploma in the respective countries if the final outcome should be positive.

The procedure of accreditation of the joint program was organized on site at University of Split in Split on 17th and 18th March 2025. The administration,

[1] ASHE received a request from the Consortium, consisting of the University of Split (Republic of Croatia), University of Cádiz (Kingdom of Spain), University of Western Brittany (Republic of France), University of Malta (Republic of Malta), University of Naples Parthenope (Republic of Italy), University of Algarve (Republic of Portugal) and Nord University (Kingdom of Norway) on November 8th 2024.

teachers, and students from Split were present in person at the panel meetings, while panellists from the other six universities participated in the panels via video link. Before the site visit, ASHE organized a training session for the Expert Panel on-line that was available all the time, and organized two preparation zoom meetings on 6th and 13th March 2025.

After the site visit ASHE organized another zoom meeting on 2nd and 15th April.

On the basis of the documentation including the Self-Evaluation Report, the Consortium Agreement and other evidence provided by both institutions prior to and during the site visit, as well as on the basis of the information gathered through conversations with different stakeholders during site-visit meetings, the Expert Panel gained a comprehensive insight into the development, content and plan for the delivery of the proposed joint doctoral study program.

Based on the Standards of the European Approach for Quality Assurance of Joint Programs, the Expert Panel assesses the overall quality of the joint doctoral program as not fully met and recommends the study program not to be accredited.

PANEL OF EXPERTS

In the sourcing of the Expert Panel members, ASHE has been guided by the principles for setting up a panel of experts as described within the ImpEA project. In accordance with the European Approach, the agency that conducts accreditation should appoint a panel composed of at least four members. The panel should combine expertise in the relevant subject(s) or discipline(s), including the work experience in the relevant field(s), and expertise in quality assurance in higher education. Through their international expertise and experience the panel should be able to consider the distinctive features of the joint program. Collectively, the panel should possess knowledge of the HE systems of the HEIs involved and the language(s) of instruction used. The panel should include members from at least two countries involved in the consortium providing the program. The panel should include at least one student.

In prior communication with the national agencies of the six European universities of the consortium, the ASHE requested proposals for potential members for appointment to the expert panel.

On the January 16th 2025, the Accreditation Council of the Agency for Science and Higher Education adopted the Decision to appoint the Expert Panel in the accreditation of the joint doctoral study program *Marine and Maritime Sciences and Technologies,* delivered by the Consortium, composed of the following members:

1. Prof. Smiljko Rudan, PhD., University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Republic of Croatia,
2. Prof. Peter Haugan, PhD., Institute of Marine Research, Kingdom of Norway,
3. Associate Prof. Camilla Sætre, PhD., University of Bergen, Faculty of Science and Technology, Kingdom of Norway,
4. Prof. Emilio Manuel Fernández Suárez, PhD., Universidad de Vigo, Departamento Exoloxia e Bioloxía Animal, Kingdom of Spain,
5. Pietro Kristović, doctoral candidate, University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, Republic of Croatia.

Pursuant to the Article 8 Paragraph 1 of the Ordinance on Implementation of Accreditation of Joint Studies of Domestic and/or Foreign Higher Education Institution(s) (CLASS: 025-05/23-02/01, FILE NUMBER: 355-01-23-01) the Consortium had the right to object to the appointment of the Expert Panel member within seven days from receipt of the Decision.

Since there was no objection on the appointed members, the procedure was conducted by the appointed Expert Panel and the coordinators of the procedure from ASHE were:

1. Valerija Macan Lukavečki, PhD
2. Mia Đikić, PhD.

BASIC INFORMATION ABOUT THE PROGRAMME

Name, location and OIB/tax number of higher education institution:
University of Split, Ruđera Boškovića 31, 21 000 Split. OIB: 29845096215

The University of Cádiz, Edificio Hospital Real, Plaza Falla, nº 8 1º Planta, Despacho 102, Cádiz. PIC: 999855340

The University of Western Brittany, 3 rue des Archives, CS93837, 29238 Brest cedex 3. PIC: 999902676,

The University of Malta, Msida MSD 2080, Malta. PIC: 999887059,

The University of Naples Parthenope, Via Amm. F. Acton, 38 – 80133, Napoli. PIC: 999856019,

The University of Algarve, Campus da Penha, 8005-139 Faro. PIC: 999863003, and

Nord University, Bodø, Norway, Postboks 1490, 8049 Bodø, Norway, PIC: 998222927.

Name and type of study programme: Joint doctoral study programme *Marine and Maritime Sciences and Technologies*

EQF level: level 8 of the European Qualifications Framework for Lifelong Learning and corresponding to the third cycle in the Framework for Qualifications of the European Higher Education Area (QF EHEA), as well as their corresponding levels at the national qualification frameworks of the countries of the Partner Institutions.

Degrees awarded: Join Doctoral Degree in Marine and Maritime Science and Technologies

ISCED field(s) of study:

- ISCED field(s) of study: 0388 Interdisciplinary programmes involving broad field 03
- ISCED field(s) of study: 0488 Interdisciplinary programmes involving broad field 04
- ISCED field(s) of study: 0588 Interdisciplinary programmes involving

broad field 05

- ISCED field(s) of study: 0788 Interdisciplinary programmes involving broad field 07
- ISCED field(s) of study: 0888 Interdisciplinary programmes involving broad field 08
- ISCED field(s) of study: 0988 Interdisciplinary programmes involving broad field 09
- ISCED field(s) of study: 1088 Interdisciplinary programmes involving broad field 10

Number of ECTS points: 180 ECTS points

Duration of the study: 3 years

Language of delivery: English

Place of delivery: Split (Republic of Croatia), Cádiz (Kingdom of Spain), Brest (Republic of France), Malta (Republic of Malta), Naples (Republic of Italy), Faro (Republic of Portugal) and Bodø (Kingdom of Norway).

Type of delivery: hybrid

Admission quota: 7 to 21 students annually

Academic year when programme delivery is planned to commence: 2025/2026.

1. Eligibility

1.1. STATUS

Evidence:

The self-evaluation report describes the participating universities, the related quality assurance systems and national frameworks. The coordinating university is tasked with the Programme administration, enrolment of doctoral students and issuance of the joint doctoral degree (diploma) and its accompanying supplement. The other 6 partner universities participate in joint academic governance. It is also stated that nearly one hundred associated partners including Kiel University but otherwise encompassing regional and local governments, companies, business confederations, student and citizen associations, NGOs, research centres, and think tanks play a pivotal role in designing and implementing the programme.

Annexes 1 and 4 provide documents supporting legal status and legal basis respectively.

Assessment:

As evidenced in Table 3 of the self-evaluation report, some universities can be self-accrediting and there is a range of evaluation agencies involved. For one of the universities (Naples), permission to use the European approach for accreditation is still pending, but work to allow awarding joint degree is in progress.

Recommendation:

1.- The procedures to permit all participating universities to use the European approach for accreditation should be completed.

Conclusion:

The committee finds that the consortium is eligible. The conditions are met.

1.2. JOINT DESIGN AND DELIVERY

Evidence:

The self-evaluation report describes in its section 1.1 the joint governing bodies. These include:

- *Doctoral Council (DCL)*
- *Doctoral Committee (DCM)*
- *Research Plan Evaluation Committee (RPEC)*
- *Thesis Evaluation Committee (TEC)*
- *Internal Quality Assurance Committee (IQAC)*
- *Local Academic Coordinator (LAC)*
- *Local Administration Offices (LAOs)*

The roles of the various bodies and their tasks are described. We note that the DCL consists of governing-level representatives for each university appointed by the rectors and also includes students. The DCM is composed of professors. It conducts the actual selection of candidates and is tasked to approve finalized research plans. A RPEC is appointed for each PhD student research project. It shall consist of academics holding a doctoral degree and may include the proposed supervisor/co-supervisor. Each TEC will consist of at least three members who all must be university professors. The Doctoral Committee (DCM) and Internal Quality Assurance Committee (IQAC) are the responsible bodies for the quality of the Programme and lists corresponding responsibilities. In addition, Self-evaluation report points to Annex 11, which contains Internal Quality Assurance Handbook. The LACs are responsible for coordination of the programme implementation at each institution. The LAOs are responsible for day-to-day operations including administrative matters and support to students. The LAO of the coordinating institution is overseeing administrative processes such as student enrolment, tuition fee management, maintenance of academic records, and issuance of certificates and diploma.

Assessment:

The joint design and delivery of the programme is well described and appears well planned.

Recommendation:

1.- Some aspects of the documentation of quality assurance should be improved, as further discussed in Chapter 9 of the present Expert Panel report.

Conclusion:

The committee finds that the Joint Design and Delivery fulfils the requirements. The conditions are met.

1.3 COOPERATION AGREEMENT

Evidence:

The self-evaluation report describes the structure of the cooperation agreement which is included in Annex 2. It specifies the rights and obligations of the Parties in the implementation of the programme as outlined in the self-evaluation report. The agreement also makes several references to the self-evaluation report which therefore will be considered as an integral part of the agreement.

1. The Joint Doctoral Study Programme is denoted "Marine and Maritime Sciences and Technologies".

2. The 7 full partners are parties to the agreement. Additional partners include associated partners who are encouraged to participate but do not sign the agreement or have formal responsibilities. Responsibilities of joint governing bodies are described in detail. It is noted that in connection with the Thesis Evaluation Committee (TEC) in Article 3.1.2 Joint Governing Bodies 4b) it is stated that "If the Programme would be organised as the Industrial Doctoral Study Programme, TEC will include a representative from the industry with Doctoral Degree". According to Article 8 Financial management, students have guaranteed funds for their research. The annual tuition fee is set at 5 kEuro. 75% of this is managed by the home institution which is required to guarantee to cover student expenses.

3. Evidence on admission and selection procedures is provided and is further described and discussed in chapter 4 of the present Expert Panel report.

4. Mobility of students as described in the self-evaluation report is stated in Article 4 Degree and Diploma 1 as mandatory for successful completion of the programme. According to Article 6.3 Parties to the agreement regulate the reception and/or employment of faculty members and administrative staff. Such mobility shall depend on the availability of funds.

5. It is noted that in Article 4 "Degree and Diploma", thesis defence is conducted according to the procedures of the home institution and that the coordinating institution issues the final Doctoral diploma according to relevant frameworks. For assessment methods, see chapter 5 of the present Expert Panel report.

Assessment:

The obligations of the 7 parties are well described in the agreement which is signed by the rectors. Responsibilities of parties should be sufficiently clear to ensure students will receive the services they will need, including mobility. The word "Programme" is often used to describe the entire activity covered by the cooperation agreement. However, in some cases like mentioned with reference to the Industrial Doctoral Study Programme above, it may be interpreted as the programme of an individual PhD candidate. The committee assumes that we have understood correctly in each case.

Recommendation:

1.- The committee recommends a revision of wording to clarify the meaning of word "Programme" in different places in the Cooperation Agreement and related documents.

Conclusion:

The committee finds that the Cooperation Agreement fulfils the requirements. The conditions are met.

2. Learning Outcomes

2.1 LEVEL

Evidence:

The self-evaluation report lists the third cycle QF-EHEA qualifications 1 to 6 that candidates should have on completion of the study. This information is also repeated in Annex 4.

Assessment:

The information provided in section 2.1 of the self-evaluation report, repeated in Annex 4 consists of a single table taken from the European framework, reproduced here:

LOs corresponding to the Qualifications Framework for the European Higher Education Area (QF-EHEA; third cycle). Table 4 presents qualifications that signify completion of the third cycle awarded to candidates who:

QF-EHEA 1.	have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;
QF-EHEA 2.	have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
QF-EHEA 3.	have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;
QF-EHEA 4.	are capable of critical analysis, evaluation and synthesis of new and complex ideas;
QF-EHEA 5.	can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;
QF-EHEA 6.	can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge-based society.

Table 4. Qualifications awarded to candidates upon completion of the third cycle

This is the correct level but the report does not provide evidence for assessing whether the level of candidates from the programme is as it should be. Related aspects are further discussed in the Expert Panel report chapter 2.2.

Recommendation:

1.- The committee recommends an explanation of how the level is to be assessed in relation to the Framework for Qualifications in the European Higher Education Area (FQ-EHEA). It should also be discussed whether the applicable national qualifications frameworks are fully in line with the FQ-EHEA. If not, there may be a need for further measures to be taken to ensure that the 6 qualifications are indeed obtained following a PhD study conducted mostly according to national or institutional traditions.

Conclusion:

The committee finds that the conditions for level of learning outcomes are partially met.

2.2 DISCIPLINARY FIELD

Evidence:

The self-evaluation report in section 2.2. lists the disciplinary field as "the science of professions, limited to one or more of the focus areas of language, relationships and actions" and Figure 5 displays the related knowledge, skills and general competences also relating to the science of professions.

Figure 5. Learning outcomes achieved by a holder of doctoral title

Knowledge[24] The candidate is: - is at the forefront of knowledge in the science of professions at a high international level, within one or more of the focus areas of language, relationships and actions - is able to make independent and innovative contributions to the development of new knowledge and theory within the science of professions - has extensive knowledge of relevant dissemination channels for the science of professions - has mastered critical and independent reflection on relevant theory, issues, the philosophy of science and methods - has in-depth knowledge of research ethics, including legislation and regulations
Skills The candidate is: - is able to critically and independently address complex questions relating to the science of professions and challenge established knowledge and practices in this field - is able to critically and independently assess and explain the appropriateness and application of various methods and processes in research projects, as well as explain the limitations of methodologies used - is able to conduct research at a high international level through own research project - is able to formulate research questions, and plan and execute research projects and innovation processes of a high academic standard using relevant technology - is able to critically and independently initiate, conduct, evaluate and disseminate research, and discuss the implications of the research for professions and society
General competences The candidate is: - is able to identify, critically assess and discuss relevant academic and ethical issues in their own and others' research, and conduct their own research with academic integrity - is able to lead complex interdisciplinary work and projects in an independent manner and in collaboration with others - is able to disseminate research through recognised, and preferably open access, national and international channels - is able to critically assess the need for innovation and research with societal relevance and initiate this

These are taken from the NORD university PhD in the science of professions. According to the listed web site https://www.nord.no/en/studies/phd-in-science-of-professions-phd-programme, this is a "A practice-oriented Ph.D. program that highlights current, socially relevant issues, placing professional practice and the field of practice at the centre. The program aims to provide Ph.D. students with broad knowledge of the scientific theories, methods, and tools that underpin scientific work." Furthermore, it is stated on the web site that "The PhD in Science of Professions is a 3-year full-time programme that includes a

training component and research work at a high scientific level. The programme highlights current, socially relevant issues that put the field of professional practice at the centre, and will contribute to innovative processes in professions. The programme is regionally anchored, shall be nationally preferred and internationally recognised, and will generate new knowledge relevant to national policy in health and education, among other things. The interdisciplinary study programme is jointly managed by the Faculty of Nursing and Health Sciences (FSH) and the Faculty of Education and Arts (FLU) at Nord University".

The self-evaluation report then describes the thematic organization of the PhD programme with the four (non-exhaustive) areas of Maritime Technologies, Ocean and Earth Sciences, Marine Natural Science and Technology, and Coastal and Marine Social Science and Humanities.

Maritime Technologies includes:

- Naval Architecture and Ship Design
- Ocean Engineering
- Maritime Safety and Navigation
- Marine Environmental Sustainability
- Regulatory Compliance and Policy
- Maritime Logistics
- Marine Robotics and Autonomous Systems

Ocean and Earth Sciences includes:

- Physical Oceanography
- Marine Geology and Geophysics
- Paleoceanography
- Climate Science
- Coastal Processes and Geomorphology
- Ocean Remote Sensing and Technology

- Marine Biogeochemistry
- Natural Hazards

Marine Natural Science and Technology includes:

- Marine Biology and Ecology
- Marine Conservation and Management
- Aquaculture and Fisheries Science
- Marine Biotechnology
- Marine Chemistry and Chemical Oceanography
- Marine Environmental Monitoring and Assessment

Coastal and Marine Social Science and Humanities includes:

- Maritime Anthropology and Sociology
- Coastal and Marine Governance
- Fisheries and Coastal Livelihoods
- Tourism and Recreation in Coastal Areas
- Maritime History and Archaeology
- Environmental Justice and Coastal Vulnerability
- Coastal Cultural Heritage Preservation
- Maritime Policy and Law
- Marine Geospatial Analysis/Planning

Table 5 describes 13 Programme Learning Outcomes and Tables 6 and 6a explain how achievement of these 13 PLOs shall fulfil the requirements for the 6 qualifications described in the third cycle QF-EHEA. Table 5 and Tables 6 and 6a are reproduced in Annex 4. Table 5 and Table 6 are shown below.

The syllabus for the compulsory 3 ECTS course is described in Annex 5.

Table 5. Programme learning outcomes

PLO 1.	Understanding of the fundamentals of Coastal, Marine and Maritime Sciences and Technologies.
PLO 2.	Capability to use advanced measurement and observing platforms, methodologies and strategies appropriate for Coastal, Marine and Maritime Sciences and Technologies, including the latest advances.
PLO 3.	Abilities to perform laboratory, field studies, theoretical, and/or computational techniques necessary to contribute to knowledge in Coastal, Marine and Maritime Sciences and Technologies, including high-performance computing and advanced analysis and visualisation techniques.
PLO 4.	Information literacy: Adequate use and merging of very different sources of information.
PLO 5.	Critical Thinking: Coastal, Marine and Maritime Sciences and Technologies deal with complex and non-linear processes: Results from one research study may lead in directions not originally anticipated, or even in multiple directions, therefore a dynamic and robust application of the scientific method is needed.
PLO 6.	Quantitative Reasoning: numerical skills along a range of scales that are essential to succeeding in an increasingly quantitative field (i.e., understanding orders of magnitude, reading maps and charts, mastering software, calculating and interpreting simple and advanced statistics, developing indicators, properly applying advanced data analysis methods, using/developing complex numerical models).
PLO 7.	Qualitative Reasoning: candidates engaging in qualitative reasoning would be expected to demonstrate a deep understanding of qualitative research methods, ethical considerations in social sciences research, and the ability to critically analyse and interpret complex social and cultural phenomena. They may also be encouraged to contribute to the advancement of theoretical frameworks within their specific field of study.
PLO 8.	Communication skills: Coastal, Marine and Maritime Sciences and Technologies deal with topics of uttermost importance for the society (weather and climate, marine resources, sustainability, environment, logistics, economy, etc.), therefore it is paramount that candidates are able to present and disseminate scientific results in a variety of ways for different target recipients.
PLO 9.	Teamwork and collaboration: Coastal, Marine and Maritime Sciences and Technologies problems often require an interdisciplinary and cross-border multi-method approach, demanding the collaboration of scientists with varied expertise. At the same time, Coastal, Marine and Maritime Sciences and Technologies provide a common scientific ground, which requires an unprejudiced and open-minded readiness for teamwork and collaboration.
PLO 10.	Creativity and Innovation: Coastal, Marine and Maritime Sciences and Technologies are fast-evolving and changing, due to advances in measurements and observation, computing power, data analysis methods, and of our understanding, so our doctoral candidates need to be trained to quickly learn and apply new technologies/methods to better understand the complex nature.
PLO 11.	Global and social awareness: Climate change, environmental threats, and the rational and sustainable use of marine resources are all issues with a strong societal significance, and with implications at local, regional, and global scales.
PLO 12.	Research ethics and scientific integrity.
PLO 13.	Contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication

Table 6. Matrix of alignment with the Qualifications Framework in the European Higher Education Area (QF-EHEA) for the third cycle (doctoral programme) with PLOs (Programme Learning Outcomes):

QF EHEA 1.	have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field; **PLO 1, PLO 2, PLO 3, PLO 6, PLO 7**
QF EHEA 2.	have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity; **PLO 12**
QF EHEA 3.	have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication; **PLO 9, PLO 10, PLO 13**
QF EHEA 4.	are capable of critical analysis, evaluation and synthesis of new and complex ideas; **PLO 4, PLO 5, PLO 10**
QF EHEA 5	can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise; **PLO 8, PLO 9**
QF EHEA 6.	can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society **PLO 11** [25]

Assessment:

In section 2.2 of the self-evaluation report, Figure 5 includes 15 learning outcomes, and Table 5 contains a different list of 13 learning outcomes. In section 2.3 there are 11 doctoral degree holder characteristica which read similarly to learning outcomes. This is rather confusing.

The first learning outcome in Figure 5 within the Skills category requires the candidate to be at the forefront of knowledge in "the science of professions, limited to one or more of the focus areas of language, relationships and actions". Science of professions is also mentioned in other learning outcomes. According to a web search, few European universities offer a PhD in the science of professions (perhaps only one). It appears odd to include this focus on "language" which is not among the areas or research lines listed under any of the 4 themes. It is unclear and unexplained what "relationships" refer to here and strange to group all others under "actions".

In order to be able to proceed, the committee assumed that the information provided in Figure 5 could be neglected. We further assumed that the references to "science of professions" is an unintended error in the documentation. In the following we concentrate on the 13 learning outcomes in Table 5 since these are the ones that are discussed in relation to the Qualifications Framework in the European Higher Education Area whereas the 15 learning outcomes in Figure 5 are not.

The 13 intended learning outcomes in Table 5 are not separated into knowledge, skills and competencies. The quality standards in the accreditation procedure of joint study programmes offered by Croatian and foreign higher education institutions (File 355-01-23-02) stipulates that "The intended learning outcomes should comprise knowledge, skills, and competencies in respective disciplinary fields". The documentation provided to the evaluation committee does not include any discussion of these 13 learning outcomes or explanation of which refer to knowledge, skills or competencies respectively. It seems that many of the learning outcomes are related to skills, some to competencies and few to knowledge.

PLO1 does refer to "understanding fundamentals" which may be considered to fall in the knowledge category. The QF-EHEA1 refers to having demonstrated "systematic understanding". The question remains whether achievement of the 13 PLOs will guarantee knowledge at the appropriate level. In contrast to the required "systematic" in the QF-EHEA, the "fundamentals" referred to in PLO1 seems to be at too low level.

The compulsory 3 ECTS course is set to deliver on PLO 4 and PLO 12 which according to Table 6 will support QF EHEA 4 and QF EHEA 2 respectively. This is a short course which shall be offered jointly to all students regardless of scientific background, discipline or specialty. The fourth field "Coastal and Marine Social Science and Humanities" investigates the social, cultural, economic, and political aspects of coastal and marine spaces, as well as the human dimensions of marine resource use, conservation, and management. From the course syllabus and references therein, it does not appear that integration of local, traditional and Indigenous knowledge systems which is known to be crucial for this field, will be covered in a satisfactory manner. The question whether students, particularly students of the fourth field "Coastal and Marine Social Science and Humanities" will have achieved the level of knowledge in research ethics and scientific integrity expected by the QF EHEA, therefore remains.

The first of the 13 learning outcomes in Table 5 refer to understanding fundamentals of "Coastal, Marine and Maritime Sciences and Technologies". The same wording is also used in several of the other PLOs. This is almost but not exactly the same as the name of the programme. It is unclear what is the added value of the word Coastal in this context particularly since the word

Coastal is included in the title of the 4th theme of the programme. Coastal topics must therefore be understood as anyway covered in the programme without a need to be repeated here. Perhaps the inclusion of the word "Coastal" is an oversight or error in producing the documents for the evaluation.

Considering other learning outcomes, it is noted that PLO 6 refers to "understanding orders of magnitude", PLO 7 to "encouraged" and PLO 9 to "unprejudiced and open-minded readiness". While these words have positive connotations, they seem to characterize learning outcomes for a much lower level than PhD. It does not seem appropriate to conclude that obtaining the related learning outcomes would qualify for the related EHEAs.

Since there is only one compulsory course, all the remaining PLOs and EHEAs will have to be achieved through the research work leading to the doctoral thesis. This arrangement calls for a thorough description of how the learning outcomes are to be achieved in the process.

It is unclear from the documentation whether all PLOs apply to all fields and disciplines. E.g. advanced measurements (PLO2), laboratory studies and high-performance computing (PLO3) and quantitative vs qualitative methods (PLO 6 and PLO7) do not seem equally relevant to all students. In particular, several seem irrelevant to or not realistic requirements for most students in social or human sciences. There is a need to clarify how the learning outcomes relates to the 4 defined fields.

The committee finds that the intended learning outcomes are formulated in a way that does not convincingly justify their relevance to the range of doctoral degrees and scientific disciplines to be expected from the programme. Furthermore, the committee finds that the intended learning outcomes are not formulated in a way that enables assessment and verifications of achievement in the course of the programme. It is also unclear whether the intended learning outcomes indicate added value coming from the joint delivery mode.

Recommendation:

1.- The committee recommends a thorough rewrite of the learning outcomes as well as the description of level and achievement sections (sections 2.1 and 2.3, respectively).

Conclusion:

The committee finds that the programme does not fulfil the requirements for learning outcomes. The conditions are not met.

2.3 ACHIEVEMENT

Evidence:

The self-evaluation report lists 11 characteristica which are expected of a doctoral degree holder, here also called a professional.

Assessment:

It is unclear how these 11 characteristica are related to the 5 Knowledge, 5 Skills and 5 General competences, in total 15 learning outcomes listed in Figure 5 of section 2.2 or the 13 learning outcomes in Table 5. The 11 characteristica are written in a language and style that make them look like learning outcomes rather than demonstration of achievements. The characteristica are relevant but not explained or discussed.

Recommendation:

1.- The committee recommends an expanded explanation of how to demonstrate that the intended learning outcomes are achieved.

Conclusion:

The committee finds that the conditions for acceptance are not met.

3. Study Programme

3.1 CURRICULUM

Evidence:

The curriculum is described in the Self-evaluation report 3.1 (table 7 of the SER is shown below), and the structure of the Programme is presented in more detail in Annex 6. The research activities cover the main part of the curriculum, divided in research plan, mobility, scientific papers and doctoral thesis. In addition, training is listed under optional activities. There is one mandatory course on research excellence of 3 ECTS, also described in Annex 5 "Course syllabi of all partners", where the listed programme learning outcomes are PLO 4 (information literacy) and PLO 12 (Research ethics and scientific integrity). No other courses are described in the documentation.

The main themes are 1) Maritime Technologies, 2) Ocean and Earth Sciences, 3) Marine Natural Sciences and Technologies, and 4) Coastal and Marine Social Sciences and Humanities. The research activities can be interdisciplinary within or between these themes.

The doctoral thesis can consist of a minimum of 3 scientific papers where the PhD candidate is first author and an introduction to the work and a conclusion of the thesis (Scandinavian model). The thesis can be also a monograph with a minimum of one paper or book chapter with the candidate as first author.

Obligations of doctoral student	**Year/Semester**					
	(1st year)		(2nd year)		(3rd year)	
MANDATORY ACTIVITIES	**I**	**II**	**III**	**IV**	**V**	**VI**
Mandatory course *Research Excellence*	+					
RESEARCH ACTIVITIES						
Research Plan	+	+				
Research mobility		+	+	+	+	
Published scientific paper(s)		+	+	+	+	+
Preparation of Doctoral Thesis					+	+
OPTIONAL ACTIVITIES	**I**	**II**	**III**	**IV**	**V**	**VI**
Training		+	+	+	+	

Assessment:

In the assessment of the curriculum, the learning outcomes are considered, in addition to how the jointness of the Programme enables the student to achieve these.

The Research Plan is developed over the first 6 months of study. From the interview at the site visit, it was clarified that the learning outcomes and necessary training activities (in addition to the mandatory course) will be a vital part of the Research Plan. The Research Plan Evaluation Committee, appointed by the Doctoral Committee (DCM), approves the Research Plan. The committee members must hold a doctoral title and expertise in the general area of the research topic. The progression of the Research Plan is monitored yearly through progress reports submitted to the DCM.

The jointness of the research is firstly established by a joint research topic coordinated by at least two partners from the Consortium. The mobility focused on research activities also facilitates joint delivery of the curriculum.

The requirement for scientific publication(s) in acknowledged journals (Q1/top 25% or Q2/top 50%, based on Web of Science, Scopus or equivalent), ensures that some of the learning outcomes are met for the candidates.

Training activities include SEA-EU doctoral courses, listed at the https://sea-eu.org/doctoral-courses/ website (link from the self-evaluation report). The courses span over a range of relevant topics and from different hosts in the consortium. The Research Potential and Shared Infrastructure Database (https://research.sea-eu.ug.edu.pl/), lists researcher and affiliated topics in addition to infrastructure.

The proposed curriculum has to some degree a joint design and delivery from the consortium partners. Each partner has the opportunity to describe their role in their contribution to the curriculum through the shared research potential & infrastructure database. The available courses for the doctorates are shown at the shared website, where at present the courses are listed for the academic year 2024-2025. The list of elective courses beyond the current academic year is not presented.

Recommendations:

1. *The criteria for meeting the programme learning outcomes should be clearly formulated to both the supervisory team, the candidate, and the Research Plan Evaluation Committee.*
2. *Include a list of elective courses available for the PhD students (beyond the current academic year)*

Conclusion

The curriculum of the study programme is adequately described. The link between the curriculum and the learning outcomes is not clearly described, only for the 3 ECTS mandatory course in Research Excellence. The standard is partially met.

3.2 CREDITS

Evidence:

The required evidence is an agreement of a common management of ECTS credits distribution and allocation, and where the consortium partners policies are available.

Assessment:

The study program is divided into ECTS credits for the research activities and dissemination, mandatory and optional training activities. Since not all partner universities evaluate the progress in doctoral studies as ECTS, the equivalent evaluation in hourly workload is applied. The agreement and policies of the partners are hence adequately met.

Recommendations:

1.- Requirements for admission and awarding the doctoral degree vary for different countries. The ECTS listed in the structure of the study programme should more clearly describe that "optional activities" for some universities must be at a minimum of 27 ECTS (example for Norway).

Conclusion:

The standard on credits is met.

3.3 WORKLOAD

Evidence:

No credit range is specified for the joint doctorate programme. The proposed duration has an expected 3-year duration, equivalent to 180 ECTS or 4.500 hours, for full-time study.

The Research Plan and yearly progress reports provide tools for the Research Plan Evaluation Committee and the Doctoral committee to evaluate the appropriateness of the workload, also to monitor the progress regularly.

Assessment:

The workload of the study programme of 3 years is in accordance with national doctoral programmes.

Recommendations:

1. *The study plan with listed number of ECTS and expected workload should be updated especially for the first semester of the first year to include more clearly the training activities.*

Conclusion:

The standard on workload is met.

4. Admission and Recognition

4.1. ADMISSION

Evidence:

Within this report "admission" is understood as a procedure leading to enrolment of a PhD candidate into the joint doctoral Programme, from the application to the moment of obtaining the status of a student.

Admission procedure is described in the Self-evaluation report and in the mandatory Annex 7.

Admission procedure can be summarized as follows:

- Public call for enrolment is published by all standard means of communication at least 90 days before the Programme starts.
- Selection procedure occurs in several stages, until the candidates with possession of Level 7 degree equivalent are selected.
- Selection procedure includes the interview of the applicant with supervisor and co-supervisor who offered the research topic.
- Applicant whose application has been denied may appeal to the Council through the Doctoral Committee.

Annex 7 provides additional details about Admission procedure, including the list of compulsory application documents. Candidate is also noted that 6 months mobility is mandatory during PhD study. Admission procedure is once again presented, in four paragraphs, providing the assessment and ranking methodology.

Assessment:

Admission procedure is clear enough. It consists of several components (graduate degree results, interview, review of Research Proposal by Doctoral Committee etc.) that jointly contribute to the appropriate selection of candidates, which is in part public, and offers the possibility to appeal.

Recommendations:

Following remarks and recommendations are given:

1. *Selection procedure is not described in detail, but it is in line with the regular admission procedures commonly observed (in Croatia). Selection procedure shall be described with more details.*
2. *Applicants are invited to fill in the online application form. Although the application form is not presented, it may be assumed that the online application form will be clear and efficient, as SEA-EU is a consortium of respected and experienced partners, running already accredited bachelor and master level programmes. It is recommended that application form is always available to potential candidates.*
3. *The interview of the applicant and the supervisor is a part of the assessment procedure. However, without any details on the form and scope of the interview, there is a possibility that supervisor(s) assessment based on the interview may be subjective (although this is not necessarily a problem). A standardized structure of the interview is recommended, as it might help to assess capability of a candidate to:*
    - *work independently,*
    - *be proactive,*
    - *being capable of explaining the ideas,*
    - *showing leadership skills, etc.*
4. *Very good results are required from a graduate degree, but no definition of the "very good" is given, or how this will put weight on ranking. It is recommended to provide a precise definition or metrics for the expected graduate results.*

Conclusion:

The committee finds that the Admission standard fulfils the requirements.

4.2. RECOGNITION

Evidence:

Within this report recognition is understood as both the recognition of the joint degree award, and the recognition of the prior learning.

Recognition of the joint degree award is described in Self-evaluation report and Annex 8. Self-evaluation report provides very short introduction to recognition procedure, but Annex 8 provides a detailed explanation of the recognition procedure in 64 pages.

Consortium recognized the problem "to identify and remove academic barriers to credit recognition" and addressed this problem in SEA-EU 1.0 project, as well as in SEA-EU 2.0 project (ongoing project).

An expert group, comprised of representatives from all SEA-EU universities, has produced the document "Conceptual Analysis of Automatic Recognition of Foreign HE Qualifications and Learning Period Report", which is provided in the Annex 8a. Documents aim to identify recognition policies, practices, and strategic planning in EU and SEA-EU partner countries. Annex 8b provides detailed instructions on how to transparently complete the process.

The procedure of the recognition of the studies completed outside the consortium may be outlined as follows:

- Formal application for the recognition of previous knowledge.
- Preliminary assessment.
- Portfolio review based on predefined criteria.
- Decision, feedback to student, and credit award.
- Appeal option.
- Record keeping.

Annex 8c is a Credits Recognition form for Qualification Recognition.

Annex 8a "Conceptual Analysis of Automatic Recognition of Foreign Higher Education Qualifications and Learning Period" introduces a concept of automatic recognition based on, among other, recognition policies, practices and strategic planning in EU and partner countries: Croatia, France,

Germany,Malta, Poland, Spain and Norway. Three types of recognition are listed: academic, professional and professional experience recognition.

Annex 8a ends with a very general bulleted list of the SEA-EU project tasks, of which the first two are:

- Task 2.1 Educational analysis.
- Task 2.2 Working for development of joint educational policies and procedures: recognition of qualifications.

Annex 8b "Users' Guidelines for academic automatic recognition of qualifications and period of study" aims to provide detailed and practical instructions on recognition procedure, and it does.

Notable elements of Annex 8b are:

- SEA-EU model for Academic Automatic Recognition of Qualifications (Chapter 4).
- Database of qualifications and period of study (Chapter 4.3).
- Table describing critical elements of diploma supplement (Chapter 5.1).
- Table that describes differences between all six partner universities in the accreditation processes (Chapter 5.2).

Assessment:

The recognition procedure developed by a joint effort of the partners in Alliance is based on careful examination of best practices, which is commendable.

Recommendations:

Following remarks and recommendations are given:

1. *Development of the Recognition procedure accepted by all partners, with even having the attribute of being "automatic", is a complex task that will inevitably contain imperfections, that will show up only in the real-word application. The existing procedure seems convincing, and partners are advised (and probably already aware) to take notes about the future needs for the refinement of the procedure.*
2. *While in the introduction (Self-evaluation report) the recognition is clearly divided to Recognition of the joint degree award and Recognition*

of prior knowledge, in Annex 8 the division is not so clear. In Chapter 4.2 all three cycles of education are listed together (bachelor, master, PhD). Formally, these are two different actions, and it is recommended to make this clearer:

   i. *Recognition of the joint degree award is performed at the level of Alliance, for the program performed by the Alliance.*
   ii. *Recognition of the prior knowledge is performed both at the level of Alliance (for SEA-EU purposes), and as usual at the institutional level, for the programme performed outside of Alliance.*

3. *Some practical aspects are not clear or ready now, at the time of accreditation:*
   i. *"Database of qualifications for academic automatic recognition" should be publicly visible on the SEA-EU website, but it is not (or not easy to find, or not ready yet).*
   ii. *It is unclear who will maintain the database: the same host as the web page host?*
4. *The purpose of the database in the Recognition process is not clear: is the database just a record of qualifications, or serves in some way in decision making process (eligibility of candidate)? This should be made clearer, as it affects the process.*

Conclusion:

The committee finds that the Recognition standard fulfils the requirements.

5. Learning, Teaching and Assessment

5.1 LEARNING AND TEACHING

Evidence:

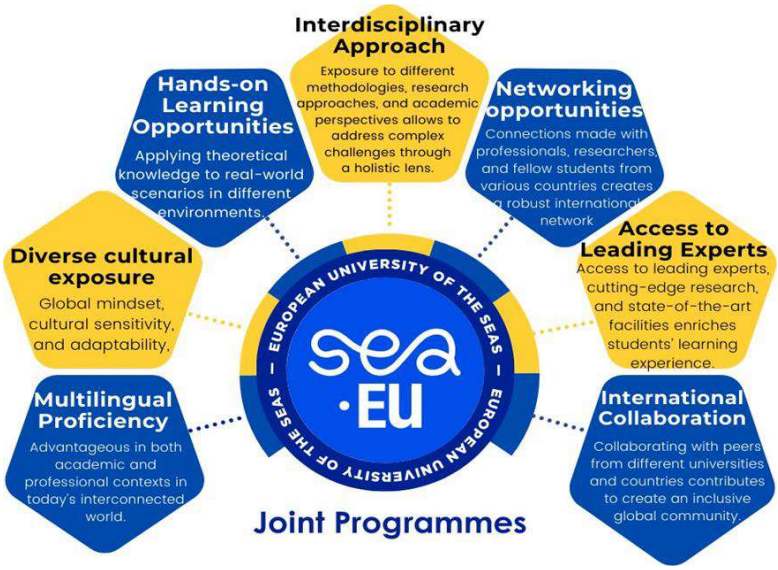
Required evidence is that the programme's learning and teaching enables the students to achieve the intended learning outcomes, and that the pedagogical methods correspond to the learning outcomes. Course manuals, made available to the students, should explain the overall objective, context and themes of the course, and include the intended learning outcomes.

Each higher education partner shall demonstrate that the educational goals are achieved. The programme shall regularly evaluate and adjust pedagogical methods and modes of delivery.

Factors also to be considered in the joint programme are: How does the program allow for flexible learning paths; What are the opportunities for flexible learning and assessment; How is peer-to-peer learning supported; What is the support for students with caring responsibilities or with special needs; What are the procedures for student complaints?

Assessment:

The main learning activities are related to the research tasks of the candidates, who in cooperation with the supervisors writes a research plan within the first 6 months. From the site visit interviews, it was clarified that the research plan should encompass how the learning outcomes should be achieved through the 3-year project. In addition to the research activities including mobility, the students can also participate in workshops to improve general skills, specific tools or methodologies, specific knowledge related to the main topic of research or transversal skills. The mandatory course "Research Excellence" is described in Annex 5, with keywords "research methodology, responsible research, open science, research ethics, research reproducibility".



In the section "General overview" in the self-evaluation report, figure 2 - Academic & research goals (also shown here), collaboration with peers from different universities and countries is addressed. Flexible learning paths can also be interpreted to be met through interdisciplinary approaches and exposure to different methodologies, research approaches, and academic perspectives, international network of professionals, researchers and research infrastructure.

Support for students with caring responsibilities or special needs was addressed in the site visit interview with the student support team. The participating universities offers support for students with disabilities, support for grants or social services and health support. At NORD university, the PhDs are employed and receives the corresponding support as other employees.

Formal procedure for student complaints is not described in the written documentation. In the site visit and interview with student support staff, this issue was addressed and stated that this was planned at start up.

Recommendations:

1. *The criteria for accepting the research plan should encompass how the learning and teaching corresponds with the intended learning outcomes.*
2. *Formal procedure for student complaints should be in place at start-up of the programme.*

Conclusion:

The requirements for learning and teaching are partially met.

5.2 ASSESSMENT OF STUDENTS

Evidence:

The following requirements are evaluated:

- Joint transcripts of records and joint diploma supplement are in use;
- General examination regulations and specific assessment methods are explained;
- Shared standards across partner universities for assessment criteria (to ensure reliability for students);
- Regular exchange of partners about criteria, standards and regular joint grading/evaluation of thesis;
- Range of assessment methods corresponding to the learning tasks;
- Evidence of constructive alignment between learning outcomes, learning and teaching activities and the assessment procedure;
- Grade conversion tables and grading grids are used;
- The partner universities have described a formal procedure for student appeals.

Assessment:

From the self-evaluation report (SER) and Annex 6, on the assessment of students, it is described that the research proposal developed by the supervisor team, and the research plan are both evaluated by the Research Plan Evaluation Committee. The research progress is monitored yearly by the Doctoral Committee and Council. During the site visit, it was clarified that the research plan should ensure that the intended learning outcomes are achieved, this would also relate to constructive alignment for the assessment procedure. This was not clearly described in the documentation and not explained directly in the site visit.

The requirement for submitting the thesis for evaluation is publication as first author of at least one scientific paper thematically related to the doctoral thesis research. The assessment of the thesis is done by two impartial expert reviewers. For the public defence of the thesis, the candidate presents their research, followed by question-and-answer session between the expert reviewers on research, methodology, findings, and conclusions. The

requirements of achieving the learning outcomes, are discussed in section 2.3 in this report.

Full partner institutions shall link to the programme website, where full description of the joint doctoral program including examination and assessment, and procedure of issuing the Joint Diploma and Supplement Diploma (SER transparency and documentation). The coordinating university, UNIST, issues the joint doctoral degree diploma and accompanying supplements. Full partner institutions state that they shall recognise the joint degree award and the diploma supplement and are responsible for, if applicable, registering the joint degree according to national law. Table 1 in SER only lists UNIST as degree awarding institution. Coordinating and partner universities participate in academic governance, teaching/supervision and assessment activities, quality assurance, and provide student support and resources such as local administration offices.

The internal quality assurance handbook approved by the Quality and Ethics Committee will monitor the evaluation of the programme and student's performance, compliance with established standards, conduct audits and periodic assessments.

Grade conversion tables/grids: not mentioned in the documentation and might not be as relevant for the doctoral programme.

Regarding formal procedure for student appeals, this is also interpreted as planned to be implemented at start up (as for student complaints).

Recommendations:

1. *The learning outcomes (evaluated in chapter 2 of this report) are inadequately described. The constructive alignment with learning and teaching activities, and assessment procedure should be revised.*
2. *A joint assessment procedure for the thesis should be made available.*
3. *The partner universities should describe a formal procedure for student appeals.*

Conclusion:

The standard on Assessment of students partially meets the requirements.

6. Student Support

Evidence:

Sources of information describing the status of student support requirements are the self-evaluation report and interviews with student service staff and students.

Summary of information from the self-evaluation report (which includes links to the websites of all partner universities):

Self-evaluation report states that all partner universities have a local academic coordinator and local administration office. The description of the functions of these units is precise for some things and general for others, so that in principle most of the requirements of the student support standard are met. However, this cannot be fully implemented in the way described by student support standard, since the technological infrastructure has not yet been built, but it can be implemented in more direct cooperation with local administration offices. Nevertheless, most of requirements are fulfilled, usually through university and Erasmus+ infrastructure, and most of them are not carried out in joint manner. Also, the information available for potential students is difficult to find in some cases, since they are located in different places. The one requirement that has not been met at all is the existence of a student handbook, or rather the information it should contain.

Summary of information provided by student services staff and students:

A digital platform for a joint program is being developed, and student services staff demonstrated a high level of cohesiveness, motivation and awareness of all issues related to student support requirements. The students interviewed did not express significant concerns about the student support requirements, based on their experience regarding SEA-EU alliance, they seem confident that the student support services requirements are met in sufficient and appropriate manner.

Assessment:

The committee estimates that most of the issues stated previously in this chapter can be handled by the local administration offices, with the note that there will be no more than 21 students per academic year.

Recommendation:

1. *all information (or information locations) to be provided to students should be concentrated in relatively small number of locations – ideally one for each university or whole consortium,*
2. *collectively address at least 80% of the student support requirements described by student support standard requirements described by "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (07.04.2025; https://impea.eu/6-student-support/), since these requirements for joint programme should be addressed in collective manner (07.04.2025; https://impea.eu/9-quality-assurance/).*

Conclusion:

The requirements of the student support standard are partially met.

7. Resources

7.1 STAFF

Evidence:

Each doctoral student will have one supervisor and, preferably, one or more co-supervisors.

The self-evaluation report does not provide information on the recruitment procedure of the academic staff involved in the programme. Nevertheless, during the visit to the coordinating institution all the partner institutions confirmed that the appointment of professors was carried out through the launch of open calls in all the universities.

The list of academic staff that may act as potential thesis supervisors was made available in Annex 10. The Annex included a short version of the individual CV showing information on teaching experience, field of research interest, proposal for a research line and links to publications and to the full academic CV.

Assessment:

Although, according to the information provided by the representatives of the partner institutions, the academic staff with a research trajectory in marine and maritime sciences and technologies had the opportunity to engage in the programme, some areas appear to be misrepresented in some of the partner institutions, leading to an unbalanced contribution of some of the research lines with respect to the potential capacity of the Alliance. This may be particularly relevant because the number of research groups within the Sea-EU Alliance is 518, but the number of professors involved in the programme is slightly higher than 120.

No additional requirements besides those fixed by the partner institutions were established by the programme to become supervisor or co-supervisor of doctoral thesis. The self-evaluation report states that co-supervisors should have a doctoral degree and "appropriate research track", but the meaning of "appropriate" was not defined in the report nor was clarified during the visit.

According to the self-evaluation report, there is not any restriction to the number of co-supervisors, allowing "one or more co-supervisors".

The content of the individual sheets in Annex 10 was of diverse quality and format even within the same university. Some of the professors did not provide links to their full CVs. Several professors, at least 12, did not propose research lines, thus making difficult for potential PhD students to identify supervisors. Some of the research proposals are too general and do not allow to infer the specific research that is intended (e.g. Maritime safety and security, Aquatic microbiology, Organization and management, Artificial intelligence…).

The number (>125) and quality of the academic staff involved in the project is satisfactory, assuring a wide range of research options for the development of the 21 PhD projects initially offered (as a maximum) by the doctoral programme. All the thematic areas of the programme are well represented in the list of potential supervisors, with more than 20% of the professors associated with technological domain and more than 25% with the "Coastal and marine social science and humanities" area. However, the participation of professors from this last area in the meetings held during the visit to the University of Split was minimal.

The list of professors in Annex 10 only includes academic staff of the partner institutions but does not inform on the research lines and opportunities offered by research centres, some of them stakeholders of the doctoral programme. The visibility of the potential co-supervisors belonging to research centres would be valuable for PhD students as, in some countries, the relative contribution of the research carried out in these centres is significant (e.g. CNRS, IFREMER, SZN, CSIC).

The balanced representation of the different thematic areas in the list of potential supervisors shown in Annex 10 is considered a strength of the programme as it provides the foundations that would potentially lead to the design of multidisciplinary and transdisciplinary research projects, one of the strategic objectives of the doctoral programme. However, the self-evaluation report does not provide any insight on the actions defined in the programme to foster interdisciplinary research.

Recommendations:

1. *With the aim of assuring that all the scientific capacity of the partners institutions are recruited into the doctoral program, they are encouraged to implement actions aiming at identifying research groups or professors with a relevant scientific trajectory in marine and maritime research that are not included in the list of potential supervisors (Annex 10).*
2. *The information contained in the individual sheets included in Annex 10 should be revised and, in some cases, completed.*
3. *It is recommended to make available for PhD students the list of potential co-supervisors belonging to research centres or companies.*
4. *The requirement of an "appropriate research track" by co-supervisors, should be clearly and precisely defined allowing an objective evaluation of the scientific adequation of candidates.*
5. *It is recommended to establish the appropriate mechanisms to foster and even prioritize interdisciplinary doctoral research, thereby taking advantage of the high diversity of research topics included, probably the main strength of the programme.*

Conclusion:

The number and research capacity of the professors engaged in the programme is satisfactory. Nevertheless, there is still space for improvement and specific actions to widen the range of research opportunities are requested. Overall, the standard of this criteria is met.

7.2 FACILITIES

Evidence:

Among the online databases built under the SEA-EU Alliance initiative, the Shared Infrastructure Database is of relevance in this context. It is accessible through the SEA-EU web site and contains 116 infrastructure positions allowing searching by university and research area.

The self-evaluation report briefly describes the general facilities of the different partner institutions, including libraries, computer/digital services, sporting facilities and recreation centres and cultural activities.

Annex 13 provides a 27 pages document containing links to the web sites of all the faculty facilities, research services and student services of the universities participating in the programme.

Assessment:

The high number of universities involved in the programme guarantee outstanding joint facilities and services for the development of PhD studies in marine and maritime sciences. It would be desirable to enhance the visibility of those singular research infrastructures of special relevance for marine and maritime research. An example of these singular infrastructures could be the excellent navigation simulators that were presented to the evaluation panel during their visit to the facilities of the Faculty of Maritime Studies of the University of Split.

There is not any mention in the self-evaluation report to the procedure to get access to infrastructures/facilities by PhD students whose supervisors do not belong to the host institution of the facilities. During the visit to the coordinating partner, it was firmly stated that all the students joining the doctoral programme will have access to all the facilities of the partner institutions regardless of the institution where they were based. This is a strong point of the joint programme that should be formalized in the form of an agreed and further approved administrative procedure that will facilitate the sharing of infrastructures and their consequent use in doctoral research projects.

Recommendations:

1. *It is recommended to approve a formal procedure regulating the access to facilities and infrastructures by all the PhD students of the programme independently of the partner institution where they are enrolled.*
2. *It would be desirable to elaborate a catalogue of singular infrastructures and equipment of relevance for marine and maritime research.*

Conclusion:

The facilities provided by the partner institutions are expected to cover the requirements of the PhD research projects that will be developed within the programme. The standard of this criteria is met.

8. Transparency and Documentation

Evidence:

The self-evaluation report presents a brief description of the main actions that will be undertaken to assure transparency and open access to all the relevant documentation of the doctoral programme.

The transparency and information accessibility policy of the doctoral programme will be based on the existing communication facilities of the SEA-EU Alliance, particularly, the SEA-EU web site, where all the information related to the programme is planned to be published.

Assessment:

It is difficult to evaluate the Transparency and Documentation section in the case of studies that are not yet established. Besides the information included in the self-evaluation report, the web sites of the two master studies already in progress within the Alliance have been reviewed. These web sites are well organized containing information on the programme structure, learning outcomes, skills developed, admission requirements, enrolment fees, etc. In the case of one of the master degrees (Port and Management and Logistics, MIPMAL), a flyer of the degree and a student handbook is also available. Information on the lecturers responsible for each course, content of each course and timetables could not be found for any of the two master degrees.

The elaboration of a student handbook and the organization of info sessions at each partner institution is positively evaluated.

The intention to proactively engage with stakeholders, students, and alumni to ensure communication on the doctoral programme is worth mentioning. However, the specific actions designed to guarantee this communication are not described.

Recommendations:

1. *The web site of the doctoral programme should contain all the information relevant both for the enrolled students and for potential future students. This information may include, apart from an explanation of the main*

aspects of the programme (supervisors, mobility, etc) a description of the content of the mandatory course and other optional courses, the lecturers responsible for the courses, timetables, etc.

2. *It is recommended to elaborate a joint communication plan that could guarantee fluent engagement of the doctoral programme with stakeholders, students, and alumni.*

Conclusion:

The relevant information about the programme is planned to be available at the SEA-EU Alliance web site. However, this information is not yet published, and special care is requested to assure transparency and full access to all the relevant information. The standard of this criteria is partially met.

9. Quality Assurance

Evidence:

Within this report Quality Assurance is understood as a process of assuring the consistency of Programme performance, and collection and analysis of Programme related data.

Self-evaluation report lists Doctoral Committee (DCM) and Internal Quality Assurance Committee (IQAC) as the responsible bodies for the quality of the Programme and lists corresponding responsibilities. In addition, Self-evaluation report points to Annex 11, which contains Internal Quality Assurance Handbook.

Annex 11 consists of:

- *Introduction, where the structure of the Annex 11 is explained.*
- *Annex 11a "SEA-EU Common Internal Quality Assurance Procedures for Joint Learning Programmes", where in the four articles explanation is provided on:*
    - *Scope of the SEA-EU Internal Quality Assurance (IQA).*
    - *The role of Joint IQA Committee (JIQAC).*
    - *Monitoring and Evaluation of Programme.*
    - *Categories for the analysis, including Key Performance Indicators (KPI).*
- *Annex 11b "SEA-EU Internal Quality Assurance Handbook", where structure of IQA system is explained, as well as the management of the documentation, and detail Process Manual presented.*

Annex 11 is an 86 pages document which carefully and with a lot of details elaborate Quality Assurance Approach.

Assessment:

Quality Assurance System is well structured and provide detailed information on the management of the key processes. Data Exchange Standards are missing, while being "crucial for integrating and jointly analysing the data". Web site is incomplete but is reasonable to assume that it can be easily

upgraded to provide the needed information about the joint study programme at the PhD level.

Recommendations:

Following remarks and recommendations are given:

1. *Quality Assurance Handbook coding is very detailed, up to a point that raises the question of the process manageability. In revision, a simplification is recommended.*
2. *Three committees and three working groups having responsibilities related to Quality are mentioned, which raises the question of the necessity for such division (see below). In a revision, a simplification is recommended.*
    i. *Quality and Ethics Committee (QEC).*
    ii. *Internal Quality Assurance Committee (IQAC).*
    iii. *Joint IQAS Committee (IQAS = internal quality assurance system), JIQAC.*
    iv. *Joint Programme Quality Assurance Working Group.*
    v. *The Working Group on Quality of Learning Programmes.*
    vi. *The Working Group on Personal Data Protection.*
3. *For the six bodies listed above, it is not clear how they relate to each other (subordinance).*
4. *Article 2.5 (page 7, Annex 11) states "The JIQAC will evaluate the following processes and the issues at least one time per year ... " but remains unclear how it will do that.*
5. *Article 3.3 (page 8, Annex 11) states "Evaluation of the Programme by specific questionnaires ..." but questionnaires are not presented.*
6. *Coding of the processes, indicators, tools, formats, records, and sheets is fine. But is also rather complex. It remains unclear if the document coding is compatible with partners regular administration, although it is a valid strategy to keep the SEA-EU records independently (parallel system).*
7. *Article 1.5.5. (page 19, Annex 11) states that "The SEA-EU academic offer website will publish the latest versions of the IQAS documents.". However, website seems not to contain these documents.*
8. *Article 1.7 (page 12, Annex 11), in the Data Exchange Standards Section, states "Once each university has collected values for the*

indicators outlined in the internal quality assurance system (IQAS) ..." which opens a question: are these indicators collected already? It is recommended that the indicators are provided as a part of the quality assurance system.

9. *Data Exchange Standards (DES) are not defined yet. In revision, it is recommended that DES standard are defined.*

Conclusion:

The committee finds that the Quality Assurance standard fulfils the requirements.

SUMMARY OF ASSESSMENTS

The following table shows an overview of the assessments:

Standard	Assessment
ELIGIBILITY	**MET**
- Status	MET
- Joint design and delivery	MET
- Cooperation agreement	MET
LEARNING OUTCOMES	**NOT MET**
- Level	PARTIALLY MET
- Disciplinary fields	NOT MET
- Achievement	NOT MET
- Regulated professions	-
STUDY PROGRAMME	**PARTIALLY MET**
- Curriculum	PARTIALLY MET
- Credits	MET
- Workload	MET
ADMISSION AND RECOGNITION	**MET**
- Admission	MET
- Recognition	MET
LEARNING, TEACHING AND ASSESSMENT	**PARTIALLY MET**
- Learning and teaching	PARTIALLY MET
- Assessment of students	PARTIALLY MET
STUDENT SUPPORT	**PARTIALLY MET**
RESOURCES	**MET**
- Staff	MET
- Facilities	MET
TRANSPARENCY AND DOCUMENTATION	**PARTIALLY MET**
QUALITY ASSURANCE	**MET**

Panel conclusion:

The standard on Learning Outcomes is assessed to not meet the requirements.

The standards on Eligibility, Admission & Recognition, Resources, and Quality Assurance are all assessed to meet the requirements.

The standards on Study Programme, Learning-Teaching & Assessment, Student Support, and Transparency & Documentation are concluded to be partially met.

Based on the Standards of the European Approach for Quality Assurance of Joint Programs, the standard on Learning Outcomes is assessed to not fulfil the requirements. The Expert Panel's conclusion is that the proposed joint doctoral study programme therefore does not meet the standard, and do not recommend the accreditation of the programme.

Annexes

1. SITE VISIT AGENDA

SITE VISIT PROTOCOL

17th and 18th March 2025

First day of the site visit of Expert Panel

Venue:
University of Split, Ruđera Boškovića 31, 21 000 Split
D1 meeting room, 1st floor

	Monday, 17th March 2025	Participants
9:00 – 09:30	**Coordinating university Management**	• Prof. Dragan Ljutić, rector • Prof. Zoran Đogaš, vice-rector for internationalisation
9.30–9.45	Internal panel meeting	
9.45–10.45	**SEA-EU Alliance Management**	• **Prof. Zoran Đogaš**, vice-rector for internationalization, UNIST • **Prof. Gabriele Sampagnaro**, UPN, Rector's Delegate for SEA-EU at UPN • **Prof. Alan Deidun**, UM, Rector's Delegate for SEA-EU at UM • **Prof. Patrícia Pinto**, UALG, Pro-Rector for the SEA-EU at UALG • **Prof. Marcela Iglesias**, UCA, vice-rector for internationalisation. SEA-EU Coordinator • **Sissel Marit Jensen**, senior advisor, NORD • **Elin-Marita B. Kristiansen**, NORD, advisor – Department for Research and Development • **Prof. Adélie Pomade**, vice-rector for SEA-EU and Mobility, Associate Professor in Environmental Law, UBO

	Monday, 17th March 2025	Participants
10.45-11.00	Internal panel meeting	
11.00–12.00	**Joint Programme Coordination**	• **Prof. Zoran Đogaš**, vice-rector for internationalization, UNIST • **Fernando Pérez Peña**, SEA-EU General Director, UCA • **Ms Delphine Dall**, Local SEA-EU Coordinator, UBO
12.00 – 12.15	Internal panel meeting	
12.15 – 13.00	**Study programme coordinators**	• **Prof. Zoran Đogaš,** Vice-rector for internationalization, UNIST • **Prof. Merica Slišković,** Faculty of Maritime Studies, UNIST • **Prof. Ing. Maurice Apap** – Deputy Director of the Doctoral School, UM Programme coordinator, UM • **Prof. Luísa Barreira** – UALG's Academic Coordinator for the Joint PhD • **Prof. Alberto Arias** – Professor in biomedicine and biotechnology, UCA • **Sissel Marit Jensen**, senior advisor, NORD • **Elin-Marita B. Kristiansen**, advisor – Department for research and development + tba programme coordinator for a PhD programme, NORD • **Prof. Philippe Pondaven** – Deputy Director of the Doctoral School, Associate Professor in Marine Biology, Biogeochemistry, and Oceanography, UBO
13.00 – 13.45	**Quality assurance representatives**	• **Nina Milanović**, Quality Assurance Office, UNIST • **Prof. Giampaolo Ferraioli**, SEA-EU Quality Assurance Committee, UPN • **Dr Jacqueline Vanhear**, Senior Executive, Quality Support Unit, UM

	Monday, 17th March 2025	Participants
		• **Sofia Custódio**, Coordinator of UALG's Quality Assurance Committee • **Nadine Schon**, Quality Assurance Office, UCA • **Sissel Marit Jensen**, senior advisor, NORD • **Elin-Marita B. Kristiansen**, advisor – Department for research and development, NORD • **Ms Emmanuelle Jacq**, Joint Programmes/Degrees Development Specialist, UBO
13.45 – 14.45	Working lunch of the Expert Panel	
14.45 –15.45	**Teaching staff (except those in managerial positions)**	• **Prof. Ana Marušić**, Department of Research in Biomedicine and Health; Head, Center for Evidence-based Medicine; Research Integrity Advisor, Doctoral School, UNIST • **Prof. Merica Slišković,** Ecology & Marine Protection, UNIST • **Prof. Frano Matić**, Oceanography, UNIST • **Prof. Toni Kekez**, Department of Hydromechanics and Hydraulics, UNIST • **Prof. Salvatore Gaglione**, Professor of Geomatics at the Science and Technology Department, UPN • **Prof. Vincenzo Piscopo**, Professor of Ship Constructions and Marine Plants, UPN • **Prof. Ing. Maurice Apap** – electrical engineering, Deputy Director of the Doctoral School, UM Programme coordinator • **Dr. Adam Gauci** – Geosciences, UM • **Prof. Luísa Barreira**, Professor in

	Monday, 17th March 2025	Participants
		the Chemistry and Pharmacy Department, Researcher in Marine Biotechnology, UALG • **Prof. Alberto Arias** – Professor in biomedicine and biotechnology, UCA • **Sissel Marit Jensen**, senior advisor, NORD • **Elin-Marita B. Kristiansen**, advisor – Department for research and development + tba programme coordinator for a PhD programme, NORD • **Prof. Philippe Pondaven** – Deputy Director of the Doctoral School, Associate Professor in Marine Biology, Biogeochemistry, and Oceanography, UBO
15.45 – 16.00	Internal panel meeting	
16.00 – 16.45	**Meeting with external stakeholders (non-teaching)**	• **Gabrielle Procaccini**, Director of Research, Stazione Zoologica Anton Dohrn • **Dr. Irene Olivé**, Researcher Integrative Marine Ecology Department, Stazione zoologica Anton Dorn Napoli • **Mr Sébastien Veysseire**, PhD, HR Service Centre Manager at CGI

Second day of site-visit of Expert Panel

Venue:
University of Split, Ruđera Boškovića 31, 21 000 Split

	Tuesday, 18th March 2025	Participants
9:00–09:45	Students support	• **Ana Ćosić**, Head of International Relations Office, UNIST • **Ana Marinović**, International Relations Office, UNIST • **Gordana Dujmović,** SEA-EU office, UNIST • **Sara Rocco** – SEA-EU Office, UPN • **Ms Maria Abdilla**, Manager, Doctoral School, UM • **Niki Papagiorcopulo**, UM • **Marleni Pereira de Azevedo**, Coordinator of UALG's International Relations and Mobility Office • **Sissel Marit Jensen**, senior advisor, NORD • **Elin-Marita B. Kristiansen**, advisor – Department for research and development, NORD • **Ms Emmanuelle Jacq**, Joint Programmes/Degrees Development Specialist, UBO • **Dr. Sabine Milde**, Graduate Center, Kiel University
9.45–10.00	Internal panel meeting	
10.00–10.45	Students	• **Roko Glavinović**, PhD student at the Faculty of Maritime Studies, Technical sciences, field of transport and traffic technology, branch of maritime and inland waterway transport, UNIST • **Antonino Ian Ferola**, PhD student at UPN

	Tuesday, 18th March 2025	Participants
		• **Ms Bianca Pace**, SEA-EU Student Council UM • **Filipe Lage,** PhD student at UALG, Member of UALG's International Relations and Mobility Office at Student Desk • **Iara Tubal** – 2nd year Master degree student of International Master of Science in Marine Biological Resources, UBO
10.45–11.00	Internal panel meeting	
11.00–12.00	Tour of the University (classrooms, laboratories, departments, computer classrooms, student services, library and other facilities)	• University Library • Faculty of Maritime Studies • Faculty of Chemistry and Technology • Faculty of Science
12.00 -12.30	Internal panel meeting	
12.30-12.45	Exit meeting with the Management	• **Prof. Dragan Ljutić**, Rector of the University of Split • **Prof. Zoran Đogaš**, vice-rector for internationalisation • **Prof. Gabriele Sampagnaro**, Rector's Delegate for SEA-EU at UPN • **Prof. Alan Deidun** – Rector's Delegate for SEA-EU at UM • **Prof. Patrícia Pinto**, Pro-Rector for the SEA-EU at UALG • **Marcela Iglesias**, Vice-Rector for internationalisation • **Sissel Marit Jensen**, senior advisor • **Elin-Marita B. Kristiansen**, advisor – Department for research and development" • **Prof. Adélie Pomade**, vice-rector for SEA-EU and Mobility, Associate Professor in Environmental Law • **Ms Delphine Dall**, Local SEA-EU Coordinator, UBO

	Tuesday, 18th March 2025	Participants
12.45–13.45	Working lunch of the Expert Panel	