



agency for science and higher education

**REPORT
OF THE EXPERT PANEL
ON THE
RE-ACCREDITATION OF
University Department of Marine Studies of the
University of Split**

Date of site visit: 19 – 21 November 2019

January 2020



The project is co-financed by the European Union from the European Social Fund. The contents of this document are the sole responsibility of the Agency for Science and Higher Education.

CONTENTS

INTRODUCTION 3

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION 6

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES 11

ADVANTAGES OF THE INSTITUTION..... 11

DISADVANTAGES OF THE INSTITUTION 11

LIST OF INSTITUTIONAL GOOD PRACTICES 11

EXAMPLES OF GOOD PRACTICE: - 11

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA 12

I. Internal quality assurance and the social role of the higher education institution 12

II. Study programmes..... 13

III. Teaching process and student support 15

IV. Teaching and institutional capacities..... 17

V. Scientific/artistic activity 18

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD..... 20

I. Internal quality assurance and the social role of the higher education institution 20

II. Study programmes..... 26

III. Teaching process and student support 34

IV. Teaching and institutional capacities..... 43

V. Scientific/artistic activity 49

APPENDICES 53

SUMMARY 62

INTRODUCTION

The Agency for Science and Higher Education (the Agency) is an independent legal entity with public authority, registered in the court register, and a full member of the European Quality Assurance Register for Higher Education (EQAR) and European Association for Quality Assurance in Higher Education (ENQA).

All public and private higher education institutions are subject to re-accreditation, which is conducted in five-year cycles by the Agency, in accordance with the Act on Quality Assurance in Science and Higher Education (Official Gazette 45/09) and subordinate regulations, and by following *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) and good international practice in quality assurance of higher education and science.

The Agency's Accreditation Council appointed an independent Expert Panel for the evaluation of University Department of Marine Studies University of Split.

Members of the Expert Panel:

- Prof. Mark Davies, University of Sunderland, United Kingdom, chair panel
- Aristomenis P. Karageorgis, PhD, Hellenic Centre for Marine Research, Institute of Oceanography, Greece
- Nenad Antolović, PhD, Institute for Marine and Coastal research, University of Dubrovnik, Republic of Croatia
- Prof. Marina Piria, PhD, Faculty of Agriculture, University of Zagreb, Republic of Croatia
- Mario Prečanica, student, Department of Aquaculture, University of Dubrovnik, Republic of Croatia.

During the site visit, the Expert Panel held meetings with the following stakeholders:

- Management,
- Rector of the University of Split
- Working group that compiled the Self-evaluation
- Quality Improvement Committee,
- Students,
- Alumni
- Heads of study programmes, Heads of the studies
- Full-time teaching staff,
- Leaders of research projects,

- Representatives of the business sector, potential employers.

The Expert Panel members had a tour of the work facilities, laboratories, library, IT classrooms, student administration office and classrooms, and attended sample lectures, where they held a brief Q&A session with students.

In accordance with the site visit protocol, the Expert Panel examined the available additional documents and study programme descriptions (learning outcomes).

The Expert Panel drafted this Report on the re-accreditation of University Department of Marine Studies University of Split based on University Department of Marine Studies University of Split self-evaluation report, other relevant documents and site visit.

The Report contains the following elements:

- Short description of the evaluated higher education institution,
- Brief analysis of the institutional advantages and disadvantages,
- List of institutional good practices,
- Analysis of each assessment area, recommendations for improvement and quality grade for each assessment area,
- Detailed analysis of each standard, recommendations for improvement and quality grade for each standard,
- Appendices (quality assessment summary by each assessment area and standard, and site visit protocol),
- Summary.

In the analysis of the documentation, site visit to the University Department of Marine Studies University of Split and writing of the Report, the Expert Panel was supported by:

- Davor Jurić, coordinator, ASHE,
- Viktorija Juriša, assistant coordinator, ASHE,

Based on the re-accreditation procedure conducted, and with the prior opinion of the Accreditation Council, the Agency issues a following accreditation recommendation to the Minister for Higher Education and Science:

1. **issuance of a confirmation on compliance with the requirements** for performing the activities, or parts of the activities
2. **denial of the license** for performing the activities, or parts of the activities
3. **issuance of a letter of expectation** with the deadline for resolving deficiencies of up to three years. A letter of expectation can include the suspension of student enrolment within a set period.

The accreditation recommendation also includes a quality grade of a higher education institution, and recommendations for quality improvement.

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION:

University Department of Marine Studies University of Split

ADDRESS: Ruđera Boškovića 37, 21000 Split

ACTING HEAD OF THE DEPARTMENT: Assoc. prof. Josipa Ferri

ORGANISATIONAL STRUCTURE:

With the purpose of organisation and delivery of study programmes and performing scientific and professional activities, the Department operates on the basis of organisational units, which include Department study programmes and Administrative services. Internal operation of organisational units and their mutual cooperation allows the realization of basic tasks of teaching and scientific-research activities. Department study programmes are scientific-educational organisational units of the Department, competent for delivering and organising comprehensive study programmes, scientific and professional activities and coordinating scientific-educational and scientific activities of teachers, scientists and students. Department study programmes encompass undergraduate university studies in Marine Biology and Technology, graduate university studies in Marine Fisheries, graduate university studies in Marine Ecology and Protection, and postgraduate university studies in Applied Marine Sciences.

A study programme unit is composed of all teachers of that organisational unit. Department's administrative services perform legal, administrative, staff and student related tasks and other general tasks. Department's administrative services include the Department Secretary Office and Student Office. Administrative services of the Rector's Office of the University of Split are competent for the Department's financial and accounting affairs, IT and general affairs, as well as maintenance. Department's administrative services are managed by the Department Secretary.

The Department Head represents and acts as the agent of the Department and manager of the institution. Term of office of the Department Head lasts for three years. After the expiry of his/her term of office, the Head may be re-elected to the same position for one more term. Department Head is elected by the Expert Council in a non-public voting procedure, following the proposal of the Rector, by a simple majority of votes of all members of the Expert Council. Appointment of the Department Head, following the proposal of the University Rector, is confirmed by the Senate. Department Head is

supported in their daily work by Deputy Head, Heads of study programmes, Department Secretary, Department Board and other bodies stipulated by the Department Regulations.

Deputy Head is competent for teaching activities at the Department's study programmes and for practical courses provided to students; scientific-research activities and international cooperation of the Department, in addition to other tasks delegated by the Department Head. Term of office of the Deputy Head lasts for three years, or until the expiry of the term of office of the Department Head. After the expiry of his/her term of office, the Deputy Head may be re-elected to the same position for one more term.

Department Secretary is a law graduate with at least five years of professional experience. Department Secretary manages the work of specialist services of the Department, assists the Department Head by ensuring the legality of all activities of the Department, ensures proper application of the law, Department regulations and general acts of the Department, prepares materials for sessions of the Expert Council, participates in the drafting of Department Regulations, general acts of the Department and contracts and agreements concluded by the Department, and is responsible for the enforcement of decisions and conclusions of the Expert Council and the Department Head.

The Expert Council is comprised of the Department Head; Deputy Head; Heads of Studies (undergraduate and graduate); Department employees holding a scientific-teaching title who have at least 50% of workload at undergraduate or graduate studies, as defined in Article 7, Paragraph 2 of Regulations on External Associates of the University of Split; one representative from the Institute of Oceanography and Fisheries, holding a scientific-teaching title and acting as the course leader at the Department's undergraduate or graduate studies; one representative of teachers from other constituents of the University of Split, holding a scientific-teaching title and acting as course leader at the Department's undergraduate or graduate studies; one representative of the Department's non-teaching staff; and four student representatives.

Source: English Self-evaluation, page 2

STUDY PROGRAMMES: Based on the Self-evaluation Report, page 5 and Mozvag Directory of Accredited Study Programmes in the Republic of Croatia

No.	Name of the study program	Type of program	No. of ECTS credits	*CROQF Level
1.	Marine Biology and Technology	Undergraduate university study programme	180	6
2.	Marine Ecology and Protection	Graduate university study programme	120	7
3.	Marine Fishery	Graduate university study programme	120	7

*Croatian Qualification Framework

NUMBER OF STUDENTS: Analytic Supplement to Self-Evaluation, page 2, table 3.1.
Number of students per study programme for the current academic year

Study programme name	Full-time students	Part-time students
Marine Ecology and Protection (511)	19	0
Marine Biology and Technology (512)	64	0
Marine Fishery (513)	39	0
Total	122	0

NUMBER OF TEACHERS: Analytic Supplement to Self-Evaluation, page 6, table 4.1.a
Staff Structure - FOR UNIVERSITIES in the current academic year

Staff*	Full-time staff		Cumulative employment		External associates	
	Number	Average age	Number	Average age	Number	Average age
Full professors with tenure	1	50	-	-	3	57,67
Full professors	1	52	-	-	3	61
Associate professors	4	42,75	-	-	7	48,86
Assistant professors	11	43,27	-	-	7	47,71
Scientific advisor (permanent/with tenure)	-	-	-	-	-	-
Scientific advisor	-	-	-	-	-	-
Senior Research Associate	-	-	-	-	-	-
Research Associate	-	-	-	-	1	38
Teaching grades	-	-	-	-	4	48,75
Assistants	-	-	-	-	1	36
Postdoctoral researcher	-	-	-	-	-	-
Employees on projects	-	-	-	-	-	-
Expert assistants	-	-	-	-	6	44,17
Technical staff	-	-	-	-	-	-
Administrative staff	2	41,5	-	-	-	-
Support staff	-	-	-	-	-	-

* Classification according to the Act on Scientific Activity and Higher Education

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

The Department of Marine Studies of the University of Split was established by the resolution of the Governing Council of the University of Split of May 22, 1998, as the Department of Maritime Affairs of the University of Split. Following the proposal of the University of Split Senate, the Department was renamed as the Department of Marine Science and Maritime Affairs by the Council Resolution of July 13, 1998. At the time, three undergraduate university study programmes were delivered by the Department: Maritime Systems and Processes, Marine Biology and Ecology, and Maritime Fisheries, which was actually integrated with the Department after the Department of Maritime and Fishing Technology was dissolved. The former Department of Maritime and Fishing Technology, as a predecessor of the existing University of Split Department of Marine Studies, was established by the Resolution of the Ministry of Education and Culture of June 5, 1991, as part of the Faculty of Maritime Studies in Dubrovnik. Organisation and delivery of study programmes were managed jointly by the Faculty of Maritime Studies in Dubrovnik and the Institute of Oceanography and Fisheries in Split. Upon completion of the 4-year study programme, students were awarded the academic title of Bachelor of Maritime Engineering in the field of Maritime and Fishing Technology, and the first students were enrolled in the academic year 1991/1992. Pursuant to the University of Split Senate resolution of May 15, 2003, undergraduate university study programme of Maritime Systems and Processes was transferred from the Department of Marine Science and Maritime Affairs to the newly-established Faculty of Maritime Studies, and the Department of Marine Science and Maritime Affairs was renamed as the Department of Marine Studies. On January 26, 2006, the University of Split Senate adopted a decision on the Department's new official name: University Centre of Marine Studies in Split, which was again changed by the Senate decision of September 26, 2011 to its current name: University Department of Marine Studies. Official address of the Department is Ruđera Boškovića 37, where the Department shares the building with three other faculties. Department's activities at the new facilities started in the summer semester of the academic year 2015/2016.

Source: English Self-evaluation, page 1

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

1. High reputation the Department has in the local community, forged through extensive and effective interaction;
2. Effective and swift resolution of staffing issues that had led to the denial of the licence for performing higher education activities;
3. Well-qualified teaching staff;
4. Opportunities for field experience that effectively prepare students for relevant employment;
5. An appropriate set of learning outcomes that are clearly defined, easy to use, and provide a strong platform for assessments, showing clear differentiation between levels and articulation with the Croatian Qualification Framework.

DISADVANTAGES OF THE INSTITUTION

1. There is some lack of understanding of, and use of, learning outcomes among teaching staff.
2. An unclear strategy for the sustainability of the Department.
3. A poor understanding among the teaching staff of modern teaching techniques and no clear strategy to move from this position.
4. The physical teaching facilities (classrooms and laboratory) are not fit-for-purpose.
5. Inefficient communication of administrative matters to students.

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE: -

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA

I. Internal quality assurance and the social role of the higher education institution

Analysis

The Department of Marine Studies of the University of Split has initiated internal quality assurance procedures including a Quality Improvement Committee. Although the framework of committees and ancillary administrative instruments is satisfactory, several weaknesses have been identified, such that functionality of the Department is seriously compromised, as indicated in the recommendations below. The Panel has recognised a concentration of power with respect to decision-making around the Acting Head of the Department and the Heads of Study Programmes, and a complementary lack of power in the deliberative aspects. In addition, there is a lack of recent elections for the post of Head of the Department and actions are warranted to re-establish good management practices and interpersonal relations in the Department.

Recommendations for improvement

The Department should improve its internal quality assurance system on all levels by effectively implementing supplementary procedures which should include, but are not limited to, the following: involving students and external stakeholders in the development of strategic documents; performing analyses based on gathered data and feedback from various stakeholders; performing work performance monitoring; rewarding employees for good service.

The Department should devise and implement a procedure for capturing and archiving all data and records, including minutes of meetings, that allows for rapid and continuous internal evaluation of the current situation and the engagement of correctional procedures in case targets are not met.

The Department should develop and implement a strategy for the sustainable functioning of the Department.

The Department should revise all its internal procedures to ensure that they comply with University requirements, for example the promotions procedure.

The Department should rapidly reform the Quality Improvement Committee, mandating its role, functioning, responsibilities, and monitoring function to ensure effective performance.

The Department should immediately instigate a formal system for responding to the reports of external and internal evaluations of performance. This might be done through the reformed Quality Improvement Committee.

The Department should, in the light of the verified tension between the majority of the teaching staff and the Management of the Department, follow the established rules on electing a Head of the Department and Heads of Study Programmes. All procedures should be applied with transparency and justice. This recommendation should be expedited rapidly to avoid having impacts on student performance.

The Department should ensure that its Expert Council acts according to standard terms of reference for Expert Councils of the University, without being affected by other parties. This recommendation should be expedited rapidly to avoid having impacts on student performance.

The Department should upgrade its web presence by adding missing information, and more importantly by providing English translation of all the contents of the web page, ensuring in each case that on-going changes to maintain currency are completed swiftly. In ensuring currency of information, the Panel encourages the exploitation of other methods, such as social media.

The Department should ensure that administrative changes to programmes, including class schedules and assessment information, are communicated to students effectively and in good time.

The Department should amend its 5-year strategy by adding components related to lifelong learning programmes and develop a system for monitoring the effectiveness of the new programme(s), perhaps via the reformed Quality Improvement Committee.

Quality grade: Minimum level of quality

II. Study programmes

Analysis

The strategic drivers, including goals, missions and objectives of the study programmes of the Department and the University align well, though perhaps this is to be expected since they are all broad, so broad in fact that their utility as drivers is questionable. The study programmes are detailed in up-to-date documents that effectively constitute a programme specification, and previous versions act as a repository showing changes to programmes over time.

The programmes' curricula show obvious linkages to social and economic needs of the Split region and indeed Croatia. However, these needs are not paramount in defining the curriculum since the programmes are naturally based around the expertise of staff, which has broadened and shifted in emphasis during the last few years as new staff were recruited. Although the Department produces competitive professionals for national and international labour markets, senior staff were unable to articulate convincingly the social or economic needs relating to the programmes.

The programme learning outcomes are clearly defined, easy to understand, appropriate to the current developments in the study programmes, assessable, and use appropriate

verbs that increase intellectual demand as the levels increase. There is clear differentiation between undergraduate learning outcomes and graduate learning outcomes, the latter having increased complexity and intellectual demand. Moreover, the learning outcomes encompass a range of subject-specific competences and more generic competencies that incorporate transferable skills into the curriculum, delivered within the context of marine science. However, some staff and students were not familiar with the nature or use of learning outcomes and there is a need for the Department to take ownership of the learning outcomes. For example, some staff were, with some mitigation, awarding passing grades to students who had not met the learning outcomes, thus undermining the concept of outcomes and by extension the competencies as stated on the diploma supplement. There was close alignment between the programme learning outcomes and the relevant level descriptors of the CroQF, but senior staff of the Department met by the Panel were unable to make a connection between the learning outcomes and the CroQF, noting that in the re-design of the programmes such alignment was made by University staff external to the Department. This situation is unsatisfactory.

Although the programmes show clear links to the job market, they are not systematically informed through the input of alumni, employers and indeed students, and there is work to do to remedy this.

Some recent revisions to courses have resulted in the allocation of ECTS credits being adjusted, and there is a need to similarly examine all the courses for continued applicability of ECTS credits, since in some cases a re-evaluation has not been made for many years.

Student practice is an integral part of the study programmes, governed by appropriate learning outcomes and attracting ECTS credits, and takes place at 'learning centres'. These centres provide sound support to students, not least in exposing them to a wide range of modern scientific, analytic and industrial equipment and practices. However, not all arrangements are covered by legal agreements and some Department staff were of the opinion that formal agreements were not necessary. The Panel considered this situation regarding agreements as unsafe from the perspective of protecting the interests of students.

Recommendations for improvement

The Department should review all curricular content across undergraduate and graduate programmes to ensure that the same material is not presented to the students more than once.

The Department should complete quickly its planned exercise to understand how learning outcomes at course level map and align to learning outcomes at programme level.

The Department should ensure that the nature of learning outcomes as mandatory threshold concepts is clearly and effectively communicated to students.

The Department should urgently ensure that the nature of learning outcomes as mandatory threshold concepts and their utility in programme and course design, delivery and assessment is clearly and effectively communicated to all teaching staff.

The Department should ensure that there is sufficient understanding among its staff of the CroQF, such that subject-specific checks on alignment can be made by staff with subject expertise.

The Department should take steps to ensure that all students who fail to meet course learning outcomes are recorded as not passing the relevant course. This could be achieved through a more robust second marking scheme, possibly with the appointment of external experts. This recommendation should be coordinated with the recommendation in section 3.8 concerning objectivity and reliability in, and evaluation of, grading.

The Department should develop and implement a scheme that allows for the continuous revision and improvement of the teaching process on the basis of evidence of the achievement of learning outcomes.

The Department should take steps to systematically engage with students, alumni and employers, taking their opinions into account in the continuous development of programmes.

The Department should re-examine the allocation of ECTS credits associated with all courses, following a systematic plan, and modify as necessary to ensure continued appropriateness.

The Department should provide students with feedback on the results of the analysis of gathered information concerning the allocation of ECTS credits and the associated implemented changes.

The Department should ensure that all locations that host student practice have current legal agreements in place that specify the obligations of both parties and focus on protecting the interests of the students.

Quality grade: Minimum level of quality

III. Teaching process and student support

Analysis

Admissions criteria are well defined and consistently applied. The University has developed tools for gathering and analysing information on students' progress, but opportunity is missed to consider the data at departmental level. The Panel detected little understanding of, or deployment of, student-centred approaches to learning. Student support is generally satisfactory, but there is a lack of planning in relation to students from vulnerable and under-represented groups.

The Department provides students with the opportunity to go abroad to attend study or professional practice through the ERASMUS+ mobility programme, but does not seem to

recognise that other schemes are available and the students would benefit from better publicity about these. Arrangements for incoming foreign students are generally good but would benefit from the introduction of classes in the English language.

The University has, in general, sound rules on assessment and these are followed well by the Department, but the Panel could find no means for ensuring objectivity and reliability in grading, or for ensuring that evaluation of grading is carried out. The Department issues diplomas and Diploma Supplements in accordance with the relevant regulations.

Given the extensive collaboration between the Department and local industry, the prospects for alumni are good, especially as local employers hold the Department in high regard. But there is room for improvement in setting admissions quotas that are aligned with the resources available to the Department.

Recommendations for improvement

The Department should introduce a system for collecting feedback from students who have transferred from other higher education institutions with regard to their experience with recognition of higher education qualifications, periods of study and prior learning in case of continuation of studies (interviews, surveys).

The Department should implement a scheme such that progression and completion data are shared and considered at departmental level, perhaps at the Expert Council, to enhance performance.

The Department should ensure that teaching methods are fully adaptable to the diversity of any present or future student populations.

The Department should become much more student-centred in its teaching by, for example, using state-of-the-art technology, adopting modern methods of teaching and assessing that involve problem-solving, creative and critical thinking, peer learning and assessment, thus encouraging autonomy in students.

The Department should introduce a personal tutor system, including as many teaching staff as possible, to manage the pastoral care of students.

The Department should make a full set of plans for supporting students from vulnerable and under-represented groups that are available for deployment at any time. As part of those plans, it should consider adopting a buddy system and ensure that students from vulnerable and under-represented groups are able to make their voice heard through membership of departmental deliberative bodies.

The Department should explore thoroughly the possibility of introducing additional means by which students can gain international experience. The results of the exploration should be presented to students.

The Department should ensure that it receives, and acts upon to enhance quality, response data from the questionnaires that students complete in relation to their mobility experiences.

The Department should ensure that incoming foreign students have the opportunity to attend classes delivered in a foreign language (English).

The Department should introduce and deploy a mechanism to ensure objectivity and reliability in grading, and to ensure that evaluation of grading is carried out. This might be achieved by a moderation or sampling process, falling short of full double grading. This recommendation should be coordinated with the recommendation in section 2.3 concerning students who fail to meet learning outcomes.

The Department should set admissions quotas using a transparent process that involves consideration at the Expert Council and uses objective evidence and criteria.

Quality grade: Satisfactory level of quality

IV. Teaching and institutional capacities

Analysis

The teachers of the Department appointed into scientific-teaching grades are appropriately qualified and experienced for effective delivery of the study programmes. However, the Department does not pay enough attention to their professional education, and this is reflected in the quality of teaching performance. Although the Department does not have its own library, the University library is readily accessible to students and is well-equipped with literature. Nonetheless, special attention should be given by the Department to preparing its own teaching materials in the Croatian language. The space, equipment and the entire infrastructure are insufficient to develop and perhaps even maintain the study programmes, particularly in providing quality practical training and research facilities. The Department is not financially autonomous and there is work to be done, in conjunction with the University, in creating and implementing a financial plan to ensure longer-term financial stability.

Recommendations for improvement

The Department should develop a clear plan for the maintenance of the student-teacher ratio, especially in the light of the proposed new study programmes, ensuring that in the workloads of both full-time and part-time teachers there is sufficient time available for research activity.

The Department should as a matter of priority allocate and effectively publicise subject coordinators for all courses.

The Department should update the ordinance concerning job position organisation to ensure that teacher appointments arise from the development goals of the Department and are aligned with current legislation and internal regulations.

The Department should ensure that all relevant criteria are taken into account when promoting teachers into higher grades and that the promotion of successful candidates is not unduly delayed.

The Department should develop and implement a comprehensive plan for the development of its teaching staff that includes actions across a number of fronts relating to both research and student learning. The plan should include, but not be limited to: developments to promote motivation and competence in research activity; compulsory training for new and untrained full-time and part-time staff in teaching, learning and assessment, particularly in relation to student-centred learning; a portfolio of staff development opportunities for staff already trained, again particularly in relation to student-centred learning; procedures for the use of sabbatical leave; a means for capturing data on staff mobility; a means for sharing good practice acquired through mobility and sabbatical activities. The effectiveness of the plan should be monitored, collecting data on all activities.

The Department should, if no substantial improvements to the physical resources (classrooms and laboratories) are immediately made, revise its quotas for student enrolment in accordance with the space capacities. That revision should be made following the process outlined in the recommendation in section 3.10 concerning admissions quotas.

The Department should develop and implement a strategy for increasing the entire infrastructure capacity, including not just space but the provision of generalist and specialist equipment. One solution may be to merge or cooperate closely with an existing institutional unit of the University.

The Department should establish a functioning committee for university literature that both encourages the publication by teaching staff in the Croatian language of university books, handbooks, manuals etc. related to the teaching topics, and ensures the provision of up-to-date teaching materials on the departmental website.

The Department should work with University of Split to create and implement a financial plan with the aim of securing medium to long-term financial stability, i.e. break even or return a small surplus to the University.

Quality grade: Minimum level of quality

V. Scientific/artistic activity

Analysis

Individual members of the Department clearly strive to achieve high quality in their research. They produce an adequate number of high quality outputs and are members of, but rarely leaders of, international research teams. They also encourage the participation

of students in research and contribute significantly to social and economic needs. However, all their considerable achievements are accomplished in what is largely a vacuum of support. There is a need for a fundamental re-examination of the departmental strategy for research, ensuring that it facilitates and encourages high-quality outputs, grant applications, and recognition at regional, national and international levels for all staff members in a framework that is both developmental and promotes sustainability.

Recommendations for improvement

The Department should establish and implement a procedure to encourage the production of high-quality scientific publications, and encourage the participation in research of the maximum number of appropriate staff. This could be achieved in part by the introduction of a reward scheme, with established criteria, for the production of high quality outputs, but should also include elements of seeding to ensure that those who do not yet have such outputs are facilitated to produce some.

The Department should plan its research activities taking into consideration the needs of society and the labour market. This could be achieved in part through the establishment of an advisory body consisting of scientists and representatives of the local community that might generate ideas for appropriate scientific projects.

The Department should develop and implement a support system for knowledge and technology transfer, integrating and interfacing as necessary with the competent unit of the University.

The Department should find means to enhance its visibility, among other things through promoting the participation of staff as invited lecturers at conferences, such that it is in a prime position to lead significant funded research projects, which will in turn increase visibility.

The Department should promote, perhaps through nomination, its own staff such that they are recipients of national and international awards for their scientific achievements.

The Department should create a strategy for research, with milestones and targets, that effectively steers the development and sustainability of the Department's research activities. The strategy could encompass within its remit addressing all of the recommendations in Section 5 of this report. The implementation of the strategy, including achievement of targets set, should be effectively monitored.

The Department should ensure that valuable research conducted by Department members is communicated to students via the study programs, as appropriate.

Quality grade: Minimum level of quality

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD

I. Internal quality assurance and the social role of the higher education institution

1.1. The higher education institution has established a functional internal quality assurance system.

Analysis

The Department has adopted in part the quality assurance policies and procedures of the University and further elaborated the system by deploying its own internal Quality Improvement Committee, operating since 2007. The Committee comprises three Department members and one student. The overall performance of the Quality Improvement Committee, as discussed also in the following sections, is not satisfactory in several aspects. However, with respect to study programmes and their content, it operates marginally acceptably. The Panel asked Committee members how the Committee had improved quality but a cogent response was not forthcoming.

The Quality Improvement Committee is said to include alumni, but such evidence is not available since the only reference to the Committee is simply a list of members on a departmental webpage, where only the three Department members noted above appear. Neither do any other stakeholders appear to be part of the Committee, and those the Panel met did not refer to any participation. From the available information it is unclear whether the Committee operates routinely in support of the Department's strategy implementation and agenda of the previous 5-year period. Available meeting records that were requested and presented to the Panel indicate periods of high activity (e.g. 2019) and others of low activity (e.g. 2018).

Although a SWOT analysis is referred to in the self-evaluation document, such information was not made available within the document. A recent SWOT analysis document was provided as evidence, but only in the Croatian language. Performance data monitoring was not a strong aspect.

The collection of data from students, for example in the form of anonymous questionnaires at the end of each course, is routinely performed by the Department and moreover the students noted some positive change in teachers' performance, but could not be sure whether the change stemmed from the feedback. Nonetheless, it appears the teachers take seriously the students' opinion and try to comply with their demands, where possible. This has the potential to be a good and effective procedure that contributes to the overall improvement of the Department's quality. Other types of data, for example grades, are also used for the management and further development of the programmes. The Panel was not informed of other potential methods concerning the collection of data related to quality.

Human resources management can be considered as poor since evaluation of existing personnel for promotion to the next level was often delayed, and in one case has led to the

resignation of a member of the Department. On the other hand, several permanent new teacher positions were achieved, thus enhancing substantially the human capital of the Department. Employing new staff has reversed the adverse ratio of permanent (full-time) to external teachers and thus fulfilled the conditions mandated by the Ministry.

The Panel has established that there is an internal quality assurance system, but its functionality is questionable. There is some tension within the Department (see section 1.3) that is currently only marginally impinging on the internal quality assurance system, but there is potential for escalation such that system collapse ensues, and as a result there is an urgent need to consider the sustainability of the departmental executive and deliberative structure.

Recommendations for improvement

The Department should improve its internal quality assurance system at all levels by effectively implementing supplementary procedures which should include, but are not limited to, the following: involving students and external stakeholders in the development of strategic documents; performing analyses based on gathered data and feedback from various stakeholders; performing work performance monitoring; rewarding employees for good service.

The Department should devise and implement a procedure for capturing and archiving all data and records, including minutes of meetings, that allows for rapid and continuous internal evaluation of position and the engagement of correctional procedures in case targets are not met.

The Department should develop and implement a strategy for the sustainability of functioning of the Department.

The Department should revise all its internal procedures to ensure that they comply with University requirements, for example the promotions procedure.

Quality grade

Minimum level of quality

1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.

Analysis

The self-evaluation document provided almost no specific information in response to the previous re-accreditation report, which contained numerous recommendations that constituted a long and diverse list of actions to be undertaken. Apart from the response on issues related to the ratio of permanent to external teachers, which was only addressed when a sanction was applied and the Department would have ceased to function completely, none was answered, and a detailed point-by-point set of replies is missing. In addition, when asked directly, Quality Improvement Committee members failed to

provide a convincing reply regarding this inconsistency. The numerous recommendations in the present report stem directly from a lack of serious consideration of the last re-accreditation report.

This lack of ability to reflect and respond to deficiencies in performance is a sign of poor management and quality control. The responsibility for making improvements based on external or internal evaluations of the Department's performance lies with the Quality Improvement Committee, which it appears is functioning inadequately and needs to be more effective.

Recommendations for improvement

The Department should rapidly reform the Quality Improvement Committee, mandating its role, functioning, and responsibilities, and monitoring function to ensure effective performance.

The Department should immediately introduce and deploy a formal system for responding to the reports of external and internal evaluations of performance.

This might be done through the reformed Quality Improvement Committee.

Quality grade

Minimum level of quality

1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.

Analysis

Students seem to be aware to some extent of the existence of the Ethics Committee but replied that they have had no reason to consult it, since no incidents of unethical or other non-acceptable behaviour have been encountered. The Panel explored the validity of that notion indirectly by placing questions to teachers and other stakeholders and it was verified. As such, the Panel strongly believes that the students enjoy a generally healthy and ethically robust teaching and studying environment, and they expressed with the best words their support, admiration, and acknowledgement of the teaching staff. The Panel directly addressed the students about any other incident potentially violating the elements of the standard but always received replies in the negative. Given the position of students and owing to the absence of any other related information, the Panel concluded that there was no indication of non-compliance with the standard in respect of students.

However, the majority of the teaching staff posed strong complaints about their relationship with the Department's management concerning alleged despotic behaviour, non-transparent procedures, delay of promotions, refusal of proposal submissions and more. One member of the teaching staff has resigned because of the situation. The Panel took notice of the complaints and discussed these with the Rector and the Acting Head of Department, but without receiving convincing replies. Both referred to inappropriate behaviour of some staff members. It appears that tension is fuelled by the absence of open

elections for the position of the Head of Department. Following her term as Head of Department, the current Head is in an acting capacity, appointed by the Rector for the third consecutive six-month period. Roots of the present situation seem to extend for at least two years. The situation is becoming increasingly toxic and will, if hasn't already, affect the students' learning process, and should be carefully resolved in order to re-establish academic integrity and freedom: there is currently a lack of a functioning academic community of scholars. Students whom the Panel met were unusually critical of the administrative aspects of the Department, citing some important (dealt with in section 1.4) and some minor misgivings. The Panel did not rule out the possibility that the students had been influenced by their teachers in bringing matters to the attention of the Panel.

These behavioural aspects with respect to the relations of the teaching staff and the Management do not appear to be considered effectively. The suitable instrument to resolve potential conflicts or problems of this nature is the Expert Council, which, however, seems to be operating in an incomplete manner since, for example, the meeting agenda is not announced properly, and subjects are voted on but not discussed. These indications of poor operation of the high-level Expert Council should be considered with care to ensure equitable treatment of all parties, and justice for all members of personnel.

In general, the Department complies with ethical standards with respect to students and external stakeholders but could display better performance with issues of its staff.

Finally, issues of academic dishonesty such as cheating are not accepted by any means and are effectively controlled by the teaching staff. Likewise, the Department has installed special software for plagiarism detection, which is used in some cases by the teaching staff.

Recommendations for improvement

The Department should, in the light of the verified tension between the majority of the teaching staff and the Management of the Department, follow the established rules on electing a Head of the Department and Heads of Study Programmes. All procedures should be applied with transparency and justice. This recommendation should be expedited rapidly to avoid having impacts on student performance.

The Department should ensure that its Expert Council acts according to standard terms of reference for Expert Councils of the University, without being affected by other parties. This recommendation should be expedited rapidly to avoid having impacts on student performance.

Quality grade

Minimum level of quality

1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic and social).

Analysis

The curricula and syllabi of the study programmes are available through the Department's website in the Croatian language and, in a very small part, in English. For example, for many topics only the titles appear in English and the content is presented in Croatian. There is an obvious need to improve the web content by adding more information and English translation. As the vision of the Department includes the deployment of new Study Programme(s) in English and subsequently the recruitment of foreign students, it is absolutely necessary to improve the appearance and contents of the website (see also section 3.7). However, the process of delivering administrative information through electronic or other means is often delayed, thus causing multiple problems to students and occasionally their families. For example, changes in class hours, examination schedules and associated information are unfortunately many times delivered with great delay thus hampering the normal flow of student work and obligations.

The Department certainly tries to present information through its website that can be accessed by students, stakeholders and interested individuals outside the University. Although information on admissions criteria, quotas, etc. do exist at the administration/secretariat, they are not always and properly given through the webpages, which without a doubt is now the core means of wide and open distribution of this kind of information.

The social role of the Department is advertised through its webpages by providing information about events associated with marine and/or environmental studies. Brochures, fliers and other documentation are made openly available.

Owing to a lack of evidence provided, the Panel was not able to identify if other indicators are made available to stakeholders through the website or other media.

Recommendations for improvement

The Department should upgrade its web presence by adding missing information, and more importantly by providing English translation of all contents of the website, ensuring in each case that on-going changes to maintain currency are completed swiftly. In ensuring currency of information, the Panel encourages the exploitation of other methods, such as social media.

The Department should ensure that administrative changes to programmes, including class schedules and assessment information, are communicated to students effectively and in good time.

Quality grade

Satisfactory level of quality

1.5. The higher education institution understands and encourages the development of its social role.

Analysis

The Department contributes substantially to the local economy by bringing into the labour market competitive and devoted young scientists that are often employed within Croatia by various private companies active in the fields of fisheries and the environment as a whole. Solid evidence was provided by vivid discussions the Panel held with stakeholders and after the Panel's short visit to such operations. The Department's alumni are also contributing directly or indirectly to advancements in technological applications by transferring their knowledge and skills to the private sector.

The local community is positively affected by the young scientists, who receive admiration from the society for their studies, which are generally considered of high quality, in particular the graduate studies. Well-educated scientists spread knowledge of marine science to other members of the community either by discussions or by participating in public awareness activities.

Both alumni and their former teachers are greatly acknowledged by the local community for their professional behaviour and contribute to the establishment of a profound admiration for the University of Split. The Department of Marine Studies produces useful individuals to society and actively supports the high reputation of the University of Split within and outside the country.

Supposedly, educated and productive students and alumni are a cornerstone to democracy and civil society. Their virtues, values and qualities reflect the entire educational system of Croatia and are a healthy component of the higher education system of the country.

Quality grade

High level of quality

1.6. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.

Both from the self-evaluation document and discussions between the Panel and Department staff, it is confirmed that the Department does not currently have any activities associated with lifelong learning programmes. No information was presented that the Department plans to fill that gap in the near future.

Recommendations for improvement

The Department should amend its 5-year strategy by adding components related to lifelong learning programmes and develop a system for monitoring the effectiveness of the new programme(s), perhaps via the reformed Quality Improvement Committee.

Quality grade

Unsatisfactory level of quality

II. Study programmes

2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.

Analysis

Study programmes are detailed in up-to-date documents that effectively constitute a programme specification. These documents clearly articulate the purpose of each study programme, in line with the broad aim of the programmes as expressed in the self-evaluation document: 'to equip students with the knowledge, skills and competencies needed to integrate quickly and successfully into the global job market.'

Programme-level goals, including the expression of learning outcomes, show strong linkage to the vision and mission stated in the 2019-2023 Strategic Plan of the Department. In turn, the Strategic Plan of the Department is consistent with the University's vision and mission. Nonetheless, programme and Department goals, visions and missions are so broad that almost any activity will fall under their remit, and thus they do not act as drivers but rather state what is already being achieved. Senior staff of the department met by the Panel were not able to give a convincing account of the relationship between the goals of the study programmes and the vision and mission of the University. Nevertheless, the study programmes themselves each deliver a broad range of knowledge and skills pertinent to modern marine science.

The programmes' curricula show obvious linkages to social and economic needs of the Split region and indeed Croatia. However, these needs are not paramount in defining the curriculum since the programmes are naturally based around the expertise of staff, which has broadened and shifted in emphasis during the last few years as new staff were recruited. Thus the nature of the programme is defined by the perceived needs of industry and economy coupled with the specific expertise of the teaching staff. However, senior staff were unable to articulate convincingly the social or economic needs relating to the programmes, and this perhaps explains the lack of, and lack of any specific reference to, social or economic needs in the self-evaluation document.

The Panel met alumni of the Department who were articulate, knowledgeable concerning their respective fields, and showed characteristics of life-long learners. The Panel also heard that many of the Department staff are graduates of its programmes and were aware that some alumni had been recruited internationally on the basis of their expertise. Thus the Panel is satisfied that the Department produces competitive professionals for national and international labour markets.

Recommendations for improvement

None

Quality grade

High level of quality

2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.

Analysis

The self-evaluation document noted that ‘Undergraduate and graduate study programme levels at the Department have clearly defined learning outcomes aligned with the CroQF level descriptors’. The review Panel paid particular attention to the programme and course learning outcomes and drew the following conclusions, which all apply in general terms: the learning outcomes are clearly defined, easy to understand, appropriate to the current developments in the study programmes, assessable, and use appropriate verbs that increase intellectual demand as the levels increase. There is clear differentiation between undergraduate learning outcomes and graduate learning outcomes, the latter having increased complexity and intellectual demand. Moreover, the learning outcomes encompass a range of subject-specific competences and more generic competencies that integrate transferable skills into the curriculum, delivered within the context of marine science.

The learning outcomes show a clear link to the vision and mission of the University as articulated in its Strategic Plan 2015-2020, especially in strategic goals relating to students, study programmes and the University in its local context.

Senior staff met by the team were not aware of whether courses were produced to meet programme-level learning outcomes, or programmes’ learning outcomes were produced on the basis of the learning outcomes at course level. These staff members confirmed that an exercise would be launched soon to determine congruence between programme learning outcomes and course learning outcomes, indicating that they were not sure of congruence. Notwithstanding that, this Panel reports such congruence, and the Department is urged to complete this exercise quickly so that the staff have a full understanding of how the learning outcomes inter-relate.

While there is a natural overlap in learning outcomes between undergraduate and graduate programmes, the Panel heard that there is some significant overlap in curricular material between these levels; meaning that, since almost all students studying at the graduate programmes have progressed from the undergraduate programme at the Department, students are exposed to the same material twice, which is unsatisfactory since students already know the material and it is a waste of staff time.

The Panel formed the view that there was close alignment between the programme learning outcomes and the relevant level descriptors of the CroQF, but senior staff of the Department met by the Panel were unable to make a connection between the learning outcomes and the CroQF, noting that in the re-design of the programmes such alignment was made by University staff external to the Department. This is not a satisfactory situation since the alignment was achieved by relying on experts from outside of the fields of study and the Department needs to take ownership of its learning outcomes.

Staff of the Department indicated that learning outcomes provided valuable guidelines as to the level at which to teach, sensibly adjusting their teaching to take into account the varying abilities of students.

The students that the Panel met were aware of learning outcomes and their nature in general, but did not consistently recognise them as threshold concepts that had to be met to pass a course or programme. More worryingly, some teaching staff, including course leaders, were seemingly unaware of the existence of learning outcomes and their function.

Alumni that the Panel met confirmed that the programmes they studied had allowed them to be competitive in their employment, even in cases where their studies were not of direct relevance to the employment, indicating the effective integration of soft and lifelong learning skills into the curriculum. Employers met by the Panel generally spoke in positive terms about the abilities of programme graduates, particularly citing their enthusiasm, skills, competencies and overall knowledge.

Recommendations for improvement

The Department should review all curricular content across undergraduate and graduate programmes to ensure that the same material is not presented to students more than once.

The Department should quickly complete its planned exercise to understand how learning outcomes at course level map and align to learning outcomes at programme level.

The Department should ensure that the nature of learning outcomes as mandatory threshold concepts is clearly and effectively communicated to students.

The Department should urgently ensure that the nature of learning outcomes as mandatory threshold concepts and their utility in programme and course design, delivery and assessment is clearly and effectively communicated to all teaching staff.

The Department should ensure that among its staff there is sufficient understanding of the CroQF, such that subject-specific checks on alignment can be made by staff with subject expertise.

Quality grade

Minimum level of quality

2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.

Analysis

The Panel checked a sample of theses and other assessments provided to it and confirmed that the learning outcomes were achieved at the correct levels, and indeed in most cases exceeded. The supplied samples of log books arising from fieldwork courses showed good evidence of meeting learning outcomes and were signed-off by University staff and the staff at the student practice host institutions. Students confirmed to the Panel that they experience a broad range of assessment types that match the programme learning outcomes.

Nonetheless, some teaching staff indicated that because of the poor quality of physical resources and a lack of class contact time, some students were not meeting course learning outcomes. Even so, these students were awarded passing grades. The Panel believes that, while this is a compassionate and supportive approach, it fundamentally undermines the concept of learning outcomes. Furthermore, this action results in competencies, such as those stated in the diploma supplement, to be inaccurate.

Department staff informed the Panel that achievement of learning outcomes is used to revise the study programmes through the participation of students in the expert council and on the basis of data from student surveys. The Panel believes that these methods could not be effectively deployed in determining the achievement of learning outcomes and concluded that consideration of learning outcome achievement was not systematic, but was informed that there is a plan to do this, though the details have yet to be developed.

Recommendations for improvement

The Department should take steps to ensure that all students who fail to meet course learning outcomes are recorded as not passing the relevant course. This could be achieved through a more robust second marking scheme, possibly with the appointment of external experts. This recommendation should be coordinated with the recommendation in section 3.8 concerning objectivity and reliability in, and evaluation of, grading.

The Department should develop and implement a scheme that allows for the continuous revision and improvement of the teaching process on the basis of evidence of the achievement of learning outcomes.

Quality grade

Unsatisfactory level of quality

2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.

Analysis

Although the section of the self-evaluation document concerning this standard was relatively lengthy, it did not contain any information relating to feedback from any group.

Programmes are reviewed as required and a fundamental review of all programmes took place in 2017/2018 as a consequence of the adoption of an action plan for quality enhancement associated with the annual report of the Department. The action plan arose in part in response to the Agency for Science and Higher Education's recommendation to the Minister responsible for science and higher education to revoke the licence for performing higher education activities. The action plan mandated the Department to initiate the process of amending study programmes and improving teaching staff arrangements that resulted in: (i) amendments to the undergraduate university study programme Marine Fisheries and renaming the study programme to undergraduate university study programme Marine Biology and Technology; (ii) amendments to the graduate university study programme Marine Biology and Ecology and renaming the study programme to graduate university study programme Marine Ecology and Protection, changing the scientific field from natural sciences to biotechnical sciences. Another round of programme review is planned for after the re-accreditation activity that this report concerns. The Panel was told that the review will focus on the outcomes of this report, taking the relevant University procedures into account, and is likely to draw on focus groups of teachers, employers, alumni and students.

The staff informed the Panel that when students are canvassed for their opinions on the programmes, the answers they give are not precise enough to warrant any change in practice. The Panel rejected this view. Students indicated to the Panel that although they completed surveys at the end of their courses, they were in general not aware of how this, or any other feedback they supplied was taken notice of by the Department and were thus unable to indicate where their voice had triggered change, if any. The single exception to this position was one case where students had asked for more English language classes and these had been supplied. In collecting feedback from students they are asked to report satisfaction on Likert scales. The Department (and University) then treats the data as continuous and takes means, whereas it should be recording modal values and distributions.

The Panel heard from alumni that they were not involved in developing the programmes in any way, but that some would like to become so involved. Similarly, other stakeholders, mostly employers, met by the Panel were only engaged in developing the programmes in a minor or informal way. The Panel believes that the Department is missing a valuable opportunity to systematically tap into the expertise of these significant and influential stakeholders to improve the currency and relevance of the programmes to the job market, in line with the missions of the programmes and the Department.

There are two new programmes at different stages of development. There is a plan to deliver one of the graduate programmes in English, in parallel, but with minor modifications to curriculum content, to the programme in Croatian. The market will be overseas students. This new proposal is funded by an external project and shows obvious alignment with University strategy documents and societal and economic drivers. Although the self-evaluation document stated that detailed proposals of new programmes are published on the Department website, the Panel was unable to find any reference to this programme on the website. The second programme is in connection with Mediterranean agronomy but is at an early stage at present and a full justification has yet to be completed, though it is strongly aligned with the 2017 University Action Plan concerning study programmes of relevance to the Mediterranean. However, for both these programmes to be implemented there would have to be considerable investment in both physical resources in terms of classrooms and laboratories, and in staffing.

The programme specification documents published on the Department's website clearly state the various constituent courses of the programmes and provide a wealth of information about their delivery, including ECTS credit allocation and regulatory information. Discussions with students, alumni and employers confirmed the contents as broadly accurate. These documents are updated at least annually and serve as a record of changes to study programmes. Revisions are based on a fitness-for-purpose basis, including the incorporation of advances in marine science.

Recommendations for improvement

The Department should take steps to systematically engage with students, alumni and employers, taking their opinions into account in the continuous development of programmes.

Quality grade

Satisfactory level of quality

2.5. The higher education institution ensures that ECTS allocation is adequate.

Analysis

The section of the self-evaluation document concerning this standard contained no pertinent evidence, nor pointed to any pertinent evidence.

The Panel heard that the relationship between workload and ECTS credits was, apart from those courses revised in the last few years, determined many years ago and the Panel considered that these may now be inaccurate. Further, ECTS credits for the fieldwork courses have not been examined for their continued applicability for some years, and their basis is not known to the Department. The staff informed the Panel that a question regarding the appropriateness of ECTS credits is contained in the course evaluation form completed by students, but an examination of documentary evidence revealed that this was not the case.

Students met by the Panel indicated that they were not provided with feedback on the results of any analysis of ECTS allocation; indeed, they were not aware of any process for examining ECTS allocation.

Recommendations for improvement

The Department should re-examine the allocation of all ECTS credits associated with all courses, following a systematic plan, and modify as necessary to ensure continued appropriateness.

The Department should provide students with feedback on the results of the analysis of gathered information concerning ECTS allocation and the associated implemented changes.

Quality grade Minimum level of quality

2.6. Student practice is an integral part of study programmes (where applicable).

Analysis

Student practice is an integral part of the study programmes, as 'fieldwork' courses. The leader of these courses is the relevant head of the study programme, which allows the head to have an overview of this significant component. The fieldwork courses are compulsory and there are four in the undergraduate programme and three in each of the graduate programmes. The courses embody a range of practical experience from short field visits, including those to relevant industrial units, to longer stays termed 'student practice' that are akin to internships and afford students a more in-depth experience of a work environment. Sites that host students are termed learning centres. The choice of a learning centre is greater for students on the graduate programmes. Students that the Panel met were appreciative of the opportunities for practice offered and found the experience valuable. Student practice is therefore integrated and systematic, governed by appropriate learning outcomes and attracting ECTS credits.

The Department's basic and specialist equipment to support the programmes is deficient (see section 4.4), but is supplemented at learning centres by extremely good facilities, which range from oceanographic research vessels and specialist analytical equipment to modern industrial equipment employed in the food processing industry. This exposure gives students good opportunities to experience modern industrial and research techniques according to their preferences. In some cases the work for student theses is carried out at learning centres, under the supervision of a member of staff from the learning centre. The staff from the learning centres assess the thesis, but not in isolation and always with a member of University staff.

In many cases links to learning centres originated through personal contacts of University staff and through long-standing alumni. At some point in the past most of those links were likely formalised and despite some extant agreements supplied to the Panel, the Department staff confirmed that not all learning centres have entered into formal agreements. It was explained to the Panel that all learning centres were asked to enter into such agreements but some had refused. Furthermore, some Department staff were of the opinion that formal agreements were not necessary. The Panel considered this situation regarding agreements as unsafe from the perspective of protecting the interests of students.

Recommendations for improvement

The Department should ensure that all locations that host student practice have current legal agreements in place that specify the obligations of both parties and focus on protecting the interests of the students.

Quality grade

Satisfactory level of quality

III. Teaching process and student support

3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.

Analysis

Criteria for the admission to the first academic year of study are published by the University on its website and these align with those of the study programmes of the Department. The requirements of the study programmes are clearly defined and published by the Department on its website. Admission criteria regarding enrolment into higher years of study are again defined by regulations at both University and Department levels.

For those students who have completed undergraduate or graduate study abroad and wish to continue their education at the Department, the applicable recognition procedure is stipulated by the University's Regulations on Academic Recognition of Foreign Higher Education Qualifications and Study Periods. The Panel regarded these processes and the regulations governing them as appropriate.

Any request for academic recognition of higher education qualifications, either Croatian or foreign, has to be submitted to the University, which transmits the relevant documentation to the Department. At the Department, a small committee reviews the documentation and prepares a report for the Expert Council, which makes the decision on recognition, formally transmitted by the Head of Department. The Expert Council recommends which courses can be recognised and their corresponding number of ECTS credits. Although the Department and University have effective mechanisms for recognising prior learning, the Panel could find no evidence of feedback from incoming students on their experiences, or of a mechanism to collect the feedback.

Recommendations for improvement

The Department should introduce a system for collecting feedback from students who have transferred from other higher education institutions with regard to their experience with recognition of higher education qualifications, periods of study and prior learning in case of continuation of studies (interviews, surveys).

Quality grade

Satisfactory level of quality

3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.

Analysis

Procedures for monitoring student progress are clearly stipulated and are governed by the University's regulations and quality assurance procedures. An overall analysis of

completion and progression is conducted at University level, and the results are presented by the Head of the Quality Centre to the University Senate. Using data from the Higher Education Institutions Information System (ISVU), the Student Office and ISVU Department Coordinator can monitor pass rates per course and study programme, and the data are always available. The University thus has adequate mechanisms for analysing student performance and pass rates, but this analysis is not considered in any deliberative way, if at all, at departmental level.

Recommendations for improvement

The Department should implement a scheme such that progression and completion data are shared and considered at departmental level, perhaps at the Expert Council, to enhance performance.

Quality grade

Satisfactory level of quality

3.3. The higher education institution ensures student-centred learning.

Analysis

Senior staff of the Department stated to the Panel that they encourage various methods of programme delivery, and almost all courses are delivered in the form of lectures, seminars and exercises. In addition to this standard organisation of teaching activities, teachers also deploy some other teaching methods especially in higher years, such as work on project assignments, seminar papers, joint discussions, and presentations by students.

Feedback from students on the quality of teaching and on the teachers is obtained through student evaluations for the winter and summer semesters each academic year, and the evaluation results are provided to each teacher for the courses s/he teaches. The Head of the Department and the chair of the Quality Improvement Committee have access to the overall student evaluation results, and the Head has an obligation to submit a report to the Rector on the measures used to improve the worst-rated teachers.

Senior staff of the Department stated to the Panel that they adapt teaching methods to diverse student populations, but provided no evidence to support this; indeed, the Panel thought that the student population was not particularly diverse.

A consideration of the self-evaluation document and meetings with students, teaching staff, and the senior staff of the Department revealed that there was little use or familiarity with modern teaching techniques, including learning technologies, and the Panel concluded that the students were not being given the opportunity to learn through the delivery of a broad range of modern teaching techniques applicable to higher education and designed to maximise the learning potential of students. Even some platforms provided by the state, for example Carnet and Merlin, are not being exploited.

Recommendations for improvement

The Department should ensure that teaching methods are fully adaptable to the diversity of any present or future student populations.

The Department should become much more student-centred in its teaching by, for example, using state-of-the-art technology, adopting modern methods of teaching and assessing that involve problem-solving, creative and critical thinking, peer learning and assessment, thus encouraging autonomy in students.

Quality grade

Minimum level of quality

3.4. The higher education institution ensures adequate student support.

Analysis

At the commencement of their studies, students are issued with an e-mail address at the unist.hr domain to be used as the official communication channel with their teachers and the wider university. At the Department level, the heads of study programmes provide guidance to students on studying and career opportunities, and effectively operate as personal tutors. This puts strain on the heads of study programmes and simultaneously reduces the diversity of contact between students and their teachers.

Undergraduate and graduate students at the Department may address any questions to, can seek assistance or advice from, the heads of study programmes or in the Student Office. The working hours of the Student Office are 09:30-22:30 Monday to Friday; during the periods of the defense of the Final or Master's theses and of enrollment, the working hours can be extended according to the needs of students. The self-evaluation noted that students have access to a legal service at the Department since the Department Secretary has a law degree. The Panel considered this wholly inappropriate since the Department Secretary is a full-time role in administering the Department and neither cannot nor should be relied on to legally counsel students.

Recommendations for improvement

The Department should introduce a personal tutor system, including as many teaching staff as possible, to manage the pastoral care of students.

Quality grade

Satisfactory level of quality

3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.

Analysis

Regulations on studies of students with disabilities at the University, adopted at the 22nd session of the Senate, define the status of a student with disabilities, the manner of

acquiring such status, and the conditions and modes of studying for students with disabilities. Furthermore, the University has established an Office for Students with Disabilities, which assists disabled students in resolving various issues, providing them with all necessary information, either in person, by phone, e-mail or by hard-copy material.

At the level of the Department there is a commissioner for students with disabilities who is responsible for monitoring the needs of disabled students. Reasonable adjustments for disabled students are made on an individual basis and the Panel concluded that, while it did not meet any disabled students to hear first-hand testimony, the arrangements adopted were sound in principle. Nonetheless, this ad hoc approach cannot account for every eventuality and there is a lack of a discrete plan to be followed to support students from vulnerable and under-represented groups that takes into account all their needs and stipulates the adjustments necessary in each type of circumstance.

The building the Department is housed in is readily accessible for disabled users, though this is not the case at 'learning centres' where the choice of activity would be restricted for disabled students.

In welcoming and integrating students from vulnerable and under-represented groups there may be value in allocating, from the time of enrolment and perhaps before, a peer 'buddy' who could act as a mentor and guide. Furthermore, given the vulnerability of the students in question here, their representation should be considered, ensuring that they have a voice in departmental affairs.

Recommendations for improvement

The Department should make a full set of plans for supporting students from vulnerable and under-represented groups that are available for deployment at any time. As part of those plans it should consider adopting a buddy system and ensure that students from vulnerable and under-represented groups are able to make their voice heard through membership of departmental deliberative bodies.

Quality grade

Satisfactory level of quality

3.6. The higher education institution allows students to gain international experience.

Analysis

Some information on international cooperation and mobility is available through the Department's website. For more detailed information students are provided with a departmental ERASMUS Coordinator who organizes an 'Information day' where students can get further information. However, almost all opportunity for studying abroad is organized through the ERASMUS+ mobility programme, even though other schemes are available.

Each academic year the University publishes a call for applications for the ERASMUS+ student mobility programme. The commission for the ERASMUS+ programme, as a permanent committee of the Department, creates a priority ranking list of students, formed by taking into account the criteria of the Department that are clearly defined in the call for applications. The list is passed to the University, which decides the successful candidates. The ranking list is published at the Department web site and afterwards on the University web site.

Following an ERASMUS+ study visit by students of the Department, the ECTS commissioner issues a decision on recognition of the courses studied and completed by students while away from the Department. The University collects information through a questionnaire on student satisfaction that seeks answers to a range of questions about how well the student was supported by both the Department and the host institution. However, senior staff of the Department informed the Panel that this important feedback is not shared with the Department and the Panel was not provided with any evidence to suggest that the Department had asked for this information.

To gain competencies required for employment in an international environment, teachers use the English language, where appropriate, as much as is practically possible, for example in giving and recommending scientific literature in the English language.

Recommendations for improvement

The Department should explore thoroughly the possibility of introducing additional means by which students can gain international experience. The results of the exploration should be presented to students.

The Department should ensure that it receives response data from the questionnaires that students complete in relation to their mobility experiences and acts upon them to enhance quality.

Quality grade

Satisfactory level of quality

3.7. The higher education institution ensures adequate study conditions for foreign students.

Analysis

The ERASMUS Coordinator of the Department, in cooperation with the International Relations Office of the University, is responsible for holding and disseminating information about the enrolment of foreign students in the Department. The departmental website presents some basic information in English for foreign students, but there is still much more to be done to make this an effective communication channel in English, and this is likely to be contributing to the paucity of incoming overseas students. This contributes to the recommendation concerning web presence in section 1.4.

The departmental ERASMUS Coordinator, in cooperation with the International Relations Office, organizes the arrival of foreign students. The Department meets all conditions necessary for receiving foreign students and taking care of their accommodation during the stay. ERASMUS exchange students have the same rights and obligations as Croatian students.

The University collects information on the level of incoming students' satisfaction with the Department's arrangements for supporting them, but, as with outgoing students (see section 3.6), senior members of the Department informed the Panel that the collected data are not shared with the Department, and this contributes to the recommendation in section 3.6 concerning the receipt and use of response data.

Foreign students have access to Croatian language courses through lifelong learning programmes at the Faculty of Humanities and Social Sciences if they show interest. However, at the Department level there are few opportunities for attending classes delivered in a foreign language (English), and this may also be contributing to the paucity of incoming overseas students.

Recommendations for improvement

The Department should ensure that incoming foreign students have the opportunity to attend classes delivered in a foreign language (English).

Quality grade

Minimum level of quality

3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.

Analysis

Implementation of the courses and assessments, the administration of examinations, and the procedures for appeal against the results of an assessment are defined by the Regulations on Studies and Study Systems of the University and by the Department's own regulations. Before the start of the academic year, the Department publishes the implementation plan for all its study programmes. The implementation plan defines all student obligations per course, including the methods of assessment and evaluation of student achievements. However, students whom the Panel met indicated that they are not always informed of examination schedules in good or sufficient time, which causes personal scheduling problems, particularly for those who have transport difficulties; for example, many of the students live outside the city of Split. This contributes to the recommendation in section 1.4 concerning administrative changes to programmes.

The curriculum is delivered in two primary modes: theoretical and practical. The study plans indicated that each mode is evaluated and graded differently (different tests) in accordance with its nature, and students confirmed to the Panel that this is the case. However, students informed the Panel that sometimes examinations are scheduled in close temporal sequence and this makes achieving high grades difficult.

While there is some support, particularly for new teachers, in the development of skills related to testing and assessment methods, and some departmental staff have gone voluntarily to workshops to improve their knowledge of these topics, there are still untrained staff assessing students. This unacceptable situation contributes to the recommendation in section 4.3 concerning a plan for the development of departmental teaching staff.

The Panel was informed by the teaching staff that the only way that objectivity and reliability of grading are checked is through feedback from student questionnaires on the performance of their teachers. The Panel considered this method both inappropriate and ineffective. Furthermore, the Panel could find no evidence to indicate that evaluation of grading exists. It is entirely possible that this scenario facilitated the situation where some students who do not meet learning outcomes can nonetheless pass courses (see section 2.3).

Reasonable adjustments for disabled students concerning assessments are made on an individual basis and the Panel concluded that, while it did not meet any disabled students to hear first-hand testimony, the arrangements adopted were sound in principle.

Students that the Panel met were, in general, content with the quality and timeliness of feedback they received on their assessed work.

Recommendations for improvement

The Department should introduce and deploy a mechanism to ensure objectivity and reliability in grading, and to ensure that evaluation of grading is carried out. This might

be achieved by a moderation or sampling process, falling short of full double grading. This recommendation should be coordinated with the recommendation in section 2.3 concerning students who fail to meet learning outcomes.

Quality grade

Satisfactory level of quality

3.9. The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.

Analysis

In accordance with the University regulations, on completion of a study programme each student is issued with a Diploma and a Diploma Supplement. These documents are supplied in both English and Croatian and are issued without charge.

The Panel paid particular attention to the format and content of the Diploma certificates and Diploma Supplements, and noted that they conformed to the University's requirements. The Panel concluded that the documents were clear, accessible and fit-for-purpose.

Recommendations for improvement

None

Quality grade

High level of quality

3.10. The higher education institution is committed to the employability of graduates.

Analysis

The Panel's discussions with alumni and external stakeholders including employers revealed that graduates are highly valued as competent practitioners by the local community, particularly in terms of the knowledge and skills afforded to the graduates via the study programmes.

In many cases graduates obtain employment through impressing staff at 'learning centres' during their practice activity. This is particularly true at the Institute of Oceanography and Fisheries in Split.

Although the Department is clearly in contact with some of its alumni, it has only recently begun a systematic engagement, principally through e-mail, and has scant data on employability, but this should improve in the future. The Panel was informed about the Department's plans for two-way exchanges of information, whereby the Department would provide, for example, information on new job positions or current developments

in marine science research, and the alumni would provide, for example, information on job opportunities for students or other aspects of the labour market.

The University and the Department provide considerable support to students in choosing a career, including events such as 'Open doors' and careers days that showcase a broad range of potential careers and further study opportunities, not simply those in marine science.

Admissions quotas are effectively set by the Department's Management, who confirmed to the Panel that the quotas are based on their personal experience and notions on capacity. The Expert Council is not involved in quota setting, neither in the discussions nor the final recommendations. The Department passes its recommendations to the University Rector for approval; thus the quotas are not based on a wide range of factors linked to either the social and labour market needs or to available resources. Indeed, if the current quotas were filled, the space issue at the Department (see section 4.4) would be even more acute and the quality of learning would be severely impacted upon.

Recommendations for improvement

The Department should set admissions quotas using a transparent process that involves consideration at the Expert Council and uses objective evidence and criteria.

Quality grade

Satisfactory level of quality

IV. Teaching and institutional capacities

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

The teachers employed by the Department into scientific-teaching grades are appropriately qualified for the delivery of the study programmes and the achievement of the learning outcomes, and for performing scientific activity (research).

According to national legislation, the ratios of students to full-time teachers per programme are appropriate and, in theory at least, ensure a good quality of learning. The student to full-time teacher ratio has improved in the last five years, in particular by employing three teachers engaged in the delivery of the Department's study programmes in the last two years. There are 122 students and 13 full-time teachers in the Department, giving a ratio of 9.38. However, there are no clear plans for maintaining this acceptable ratio.

Information on teacher workload is available, and it is in line with relevant legislation and policies, the regulations of competent bodies, and collective agreements. The ratios of courses delivered by teachers employed at the Department to the total teacher workload for each study programme are appropriate, with a minimum of 0.56 (Table 1).

Table 1 Study programme, number of students enrolled and ratio of full-time teachers to total teacher workload.

Study programme	Students	Ratio		
		All Courses	Mandatory courses	Elective courses
Undergraduate				
Marine Biology and Technology	64	0.57	0.56	0.69
Graduate				
Marine Ecology and Protection	19	0.66	0.70	0.62
Marine Fisheries	39	0.77	0.87	0.66

However, according to study programme documents published on the Department's website, the subject coordinator for several courses is not assigned. For example, for the graduate study programme in Marine Ecology and Protection, subject coordinators are assigned to 27 courses, but the remaining 19 courses have no person assigned. Of those 19 courses, 13 courses are elective. The Panel asked Departmental staff about this situation but received no satisfactory explanation.

In terms of the distribution of duties, there is adequate allocation for teaching, professional and personal development (see section 4.3), and administrative duties, but the allocation for research could be better managed to increase scientific productivity.

Recommendations for improvement

The Department should develop a clear plan for the maintenance of the student-teacher ratio, especially in the light of the proposed new study programmes, ensuring that in the monitoring of workloads of both full-time and part-time teachers there is sufficient time available for research activity.

The Department should as a matter of priority allocate and effectively publicise subject coordinators for all courses.

Quality grade

Satisfactory level of quality

4.2. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures which include the evaluation of excellence.

Analysis

The ordinance concerning job position organisation is outdated, and teacher appointments are not arising from the development goals of the Department nor are they aligned with current legislation and internal regulations.

Based on internal rules prescribing the procedure to be followed in advertising vacancies and the appointment of teachers, the Department considers applicants' teaching and research activity as well as feedback from students. Nonetheless, the Department does not have adequate methods for the selection of the best candidates and comprehensive criteria that ensure the selection of excellent candidates do not exist.

According to national regulations, promotion of teachers into higher grades is based on an evaluation which takes into account the important achievements such as international contribution to the scientific discipline, high-impact publications, significant scientific discoveries, successful projects, success in securing additional funds, supervision of final and graduation theses, authorship of textbooks / study materials, popular lectures, etc. However, at the Department only a minimum of achievements are evaluated. Additional criteria for the promotion of teachers into higher grades that might match institutional priorities do not exist. The Panel saw evidence that seemed to indicate that some teachers had met all the criteria for promotion but were not being promoted.

Rewarding of excellence, and the identification of indicators of excellence at the level of the Department do not exist.

Recommendations for improvement

The Department should update the ordinance concerning job position organisation to ensure that teacher appointments arise from the development goals of the Department and are aligned with current legislation and internal regulations.

The Department should ensure that all relevant criteria are taken into account when promoting teachers into higher grades and that the promotion of successful candidates is not unduly delayed.

Quality grade

Minimum level of quality

4.3. The higher education institution provides support to teachers in their professional development.

Analysis

The Department provides opportunities for the improvement of teaching competencies through workshops and seminars organised by the University, but participation by teachers is low and there is little encouragement to participate from the Department. Although there is the possibility of using sabbatical leave for personal development, this opportunity has not been exploited and the Panel heard that sabbaticals are not promoted by the Department. Teachers are not encouraged by the Department to participate in the competency development programmes and a plan for the professional development of teachers is absent. This is important because the Panel did not find strong evidence of the use of modern teaching methods or a student-centred approach (see section 3.3).

The Department encourages the assessment and improvement of teaching competencies based only on the results of student satisfaction surveys and not on any method of peer-review recommendations.

Teachers can and do participate in international mobility programmes, typically ERASMUS+, but there is a lack of adequate record keeping on such mobility, or on how teachers facilitate their own participation. However, teachers are encouraged to share their experiences post-mobility.

Recommendations for improvement

The Department should develop and implement a comprehensive plan for the development of its teaching staff that includes actions across a number of fronts relating to both research and student learning. The plan should include, but not be limited to: developments to promote motivation and competence in research activity; compulsory training for new and untrained full-time and part-time staff in teaching, learning and assessment, particularly in relation to student-centred learning; a portfolio of staff development opportunities for staff already trained, again particularly in relation to student-centred learning; procedures for the use of sabbatical leave; a means for capturing data on staff mobility; a means for sharing good practice acquired through mobility and sabbatical activities. The effectiveness of the plan should be monitored, collecting data on all activities.

Quality grade

Minimum level of quality

4.4. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.

Analysis

According to strategy goals of the Department (2019–2023), there is a desire to improve equipment. While the Panel agrees with this desire, it also notes that the details of the improvements to the infrastructure are not clearly defined and neither is there a mechanism to progress the desire.

The space, equipment and the entire infrastructure for the delivery of the study programmes is confined to one laboratory and two classrooms. The classroom spaces are not sufficient for the delivery of current study programmes since for some courses classes are run twice to accommodate all the students, and there is clearly no capacity for coping with the increase in students that the new programmes will bring. Indeed, current numbers of students enrolled are less than the quota offered. Availability of laboratories and their contents in terms of generalist and specialist equipment for practical training is insufficient. In at least one of the classrooms the WiFi connection is sub-standard.

The space, equipment and the entire infrastructure are inadequate for the implementation of scientific and professional activities.

Recommendations for improvement

The Department should, if no substantial improvements to the physical resources (classrooms and laboratories) are immediately made, revise its quotas for student enrolment in accordance with the space capacities. That revision should be made following the process outlined in the recommendation in section 3.10 concerning admissions quotas.

The Department should develop and implement a strategy for increasing the entire infrastructure capacity, including not just space but the provision of generalist and specialist equipment. One solution may be to merge or cooperate closely with an existing institutional unit of the University.

Quality grade

Unsatisfactory level of quality

4.5. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.

Analysis

The Department does not possess its own library; rather, students use the library of the University. Student feedback regarding the University library in terms of the opening hours and titles available, including electronic titles and access to journal articles, has been satisfactory. Titles from the mandatory course reading list are purchased in at least one copy, and the selection of titles is done in cooperation with the scientific-teaching staff of the Department. An adequate number of archived final, graduate, specialist, and PhD theses are available in the institutional repository. Teaching staff met by the Panel raised no issues of inadequacy of the library provision in meeting their research needs.

However, up-to-date teaching materials in the Croatian language written by the teaching staff and approved by the University are not available. Also, teaching materials in the Croatian language are not readily available on the Department's website.

Recommendations for improvement

The Department should establish a functioning committee for university literature that both encourages the teaching staff to publish university books, handbooks, manuals etc. related to the teaching topics in the Croatian language, and ensures the provision of up-to-date teaching materials on the departmental website.

Quality grade

Satisfactory level of quality

4.6. The higher education institution rationally manages its financial resources.

Analysis

The Department does not have its own bank account and financial independence; all financial activities are undertaken at the level of the University. However, according to financial accounts supplied by the University, in the last three years the Department has operated with a negative balance sheet, i.e. the University is subsidising the Department. No retrospective or prospective financial plan was supplied as evidence to the Panel.

Information from the self-evaluation document and in financial accounts shows that the income of the Department is received exclusively from the State budget. The Panel could find no evidence of any additional sources of funding for the Department which could be used for departmental development and improvement. The Department variously hosts and participates in current research projects, including those funded at a national level, but the associated funding is naturally not related to institutional development and improvement.

Recommendations for improvement

The Department should work with University of Split to create and implement a financial plan with the aim of securing medium- to long-term financial stability, i.e. break even or return a small surplus to the University.

Quality grade

Satisfactory level of quality

V. Scientific/artistic activity

5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of scientific research.

Analysis

Staff participation in research is governed by the scientific research strategy document of the Department, which is in accordance with the Ordinance on conditions for issuing a license for scientific activity, the conditions for re-accreditation of scientific organisations and the content of the license.

According to the Table V-1 in the self-evaluation document, departmental staff published 56 articles in journals of the 'highest category' between 2015 and 2018, as defined by the Regulations on requirements for appointment to scientific titles. All these publications are co-authored with persons external to the Department and University, typically other universities and research institutes. This shows good cooperation and a wide network of research contacts. Some outlets chosen for publication have high impact factors, given the field of study. The data amount to a mean publication rate per capita per year of 0.64, which is an acceptable productivity rate, given the facilities available to staff. During the above period an additional 23 papers were published in other categories, ~90% of which were co-authored with external persons. Some departmental staff, particularly those at higher grades, are recognized internationally as experts in their fields and participate in the organization of national and international scientific and professional conferences, workshops, summer schools and symposia (Table V-2 in the self-evaluation document). Nonetheless, much of the above-mentioned has been achieved through individual staff acting on their own initiative and without the support of a clear departmental framework for research activity, despite the existence of a scientific research strategy document for the Department. A solid developmental framework would have the potential to raise the impact and quality of research at the Department.

Recommendations for improvement

The Department should establish and implement a procedure to encourage the production of high-quality scientific publications, and encourage the participation in research of the maximum number of appropriate staff. This could be achieved in part by the introduction of a reward scheme, with established criteria, for the production of high quality outputs, but should also include elements of seeding to ensure that those who do not yet have such outputs are facilitated to produce some.

Quality grade

Satisfactory level of quality

5.2. The higher education institution provides evidence for the social relevance of its scientific / artistic / professional research and transfer of knowledge.

The Department and its teachers successfully cooperate to some extent with the economy and public sector, resulting in professional projects, studies and survey reports. Moreover, in some cases the Department has exploited its relationships with 'learning centres' to forge research collaborations, with the aim of connecting practice, science and research. However, there is no systematic means of taking into consideration the needs of society and the labour market in planning research activities; rather, the good works reported to the Panel have been achieved largely through happenstance. There is an office for projects and transfer of technology at the University, but this is not used by the Department.

Recommendations for improvement

The Department should plan its research activities taking into consideration the needs of society and the labour market. This could be achieved in part through the establishment of an advisory body consisting of scientists and representatives of the local community that might generate ideas for appropriate scientific projects.

The Department should develop and implement a support system for knowledge and technology transfer, integrating and interfacing as necessary with the University unit with this function.

Quality grade

Satisfactory level of quality

5.3. Scientific/artistic and professional achievements of the higher education institution are recognized in the regional, national and international context.

Analysis

From the Table V-3 in the self-evaluation document it can be concluded that both scientific outcomes and some transfer activities are valued by the regional community. These are indicators of both scientific reputation and dedication to the scientific community. One Department member has been awarded a prize from the University; however, the Department teaching, associates and professional staff are without national and international awards for their scientific achievements. With such rewards the Department would have greater visibility in regional, national and international contexts and that would lever more, and more significant, collaborations with other universities and research centres.

The Department has not been a leading partner in any project financed by the Croatian Science Foundation or the EC's Horizon 2020 programme in the last 5 years. Nonetheless, members of the Department have participated successfully as partners in various funded research projects.

Tables 5.4 and 5.5 of the Analytical Annex indicate that Department members engage in organizing conferences and are members of journal editorial boards. This is a positive

reputation indicator because inexperienced researchers will not be nominated to these positions, but there is scope for enhanced participation.

Recommendations for improvement

The Department should find means of enhancing its visibility, among other things by promoting the participation of staff as invited lecturers at conferences, such that it is in a prime position to lead significant funded research projects, which will in turn increase visibility.

The Department should promote, perhaps through nomination, its own staff so that they are recipients of national and international awards for their scientific achievements.

Quality grade

Minimum level of quality

5.4. The scientific / artistic activity of the higher education institution is both sustainable and developmental.

Analysis

The Department founded its strategic programme of scientific research on its long-term experience and in accordance with the relevant strategic documents, principally the Strategic Plan of the University of Split 2015–2020, and the Scientific Strategy of the University of Split 2017–2021.

Table V-4 in the self-evaluation document shows that the Department has nominated 24 scientific research topics. These range from the very broad to the very specific and the Panel believes that the current staffing situation makes it impossible to address all of them in a thorough manner. Ever since the Department adopted its strategic programme of scientific research in 2014, there has been no analysis or evaluation of performance with respect to the strategy, and thus the Department is unable to recognize which topics have been realized, what the issues are with the strategy and how any issues might be resolved. The Panel directly asked the senior staff of the Department how its research was both sustainable and developmental and received no coherent response. The Panel concluded from all of the above that the Department has not taken any steps to ensure that its scientific activity is sustainable and developmental.

Recommendations for improvement

The Department should create a strategy for research, with milestones and targets, that effectively steers the development and sustainability of the Department's research activities. The strategy could encompass within its remit addressing all of the recommendations in Section 5 of this report. The implementation of the strategy, including achievement of targets set, should be effectively monitored.

Quality grade

Unsatisfactory level of quality

5.5. Scientific/artistic and professional activities and achievements of the higher education institution improve the teaching process.

Analysis

The Department's equipment for scientific research and professional activity, though of unsatisfactory quality (see section 4.4), is used in teaching at all study levels and is available for laboratory exercises and student projects.

Students appear as co-authors on several scientific and professional papers published in national and international conference proceedings and journals indexed in relevant databases. While this is positive, and a boost for students' career prospects, some of the outlets are of inferior quality.

The Panel asked both the students and teaching staff about how research by members of the Department was included in the curriculum and for examples of such. Though there were pockets of such activity, the responses were far from convincing.

Recommendations for improvement

The Department should ensure that valuable research conducted by Department members is communicated to students via the study programmes, as appropriate.

Quality grade

Satisfactory level of quality

APPENDICES

1. Quality assessment summary - tables

<i>Quality grade by assessment area</i>				
<i>Assessment area</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
<i>I. Internal quality assurance and the social role of the higher education institution</i>		X		
<i>II. Study programmes</i>		X		
<i>III. Teaching process and student support</i>			X	
<i>IV. Teaching and institutional capacities</i>		X		
<i>V. Scientific/artistic activity</i>		X		

<i>Quality grade by standard</i>				
<i>I. Internal quality assurance and the social role of the higher education institution</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
1.1. The higher education institution has established a functional internal quality assurance system.		X		
1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.		X		
1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.		X		
1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic and social).			X	
1.5. The higher education institution understands and encourages the development of its social role.				X
1.6. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.	X			

<i>Quality grade by standard</i>				
<i>II. Study programmes</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.				X
2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.		X		
2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.	X			
2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.			X	
2.5. The higher education institution ensures that ECTS allocation is adequate.		X		
2.6. Student practice is an integral part of study programmes (where applicable).			X	

<i>Quality grade by standard</i>				
<i>III. Teaching process and student support</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.			X	
3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.			X	
3.3. The higher education institution ensures student-centred learning.		X		
3.4. The higher education institution ensures adequate student support.			X	
3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.			X	
3.6. The higher education institution allows students to gain international experience.			X	
3.7. The higher education institution ensures adequate study conditions for foreign students.		X		
3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.			X	
3.9. The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.				X
3.10. The higher education institution is committed to the employability of graduates.			X	

Quality grade by standard

<i>IV. Teaching and institutional capacities</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
4.1. The higher education institution ensures adequate teaching capacities.			X	
4.2. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures which include the evaluation of excellence.		X		
4.3. The higher education institution provides support to teachers in their professional development.		X		
4.4. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.	X			
4.5. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.		X		
4.6. The higher education institution rationally manages its financial resources.			X	

Quality grade by standard

<i>V. Scientific/artistic activity</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of scientific research.			X	
5.2. The higher education institution provides evidence for the social relevance of its scientific / artistic / professional research and transfer of knowledge.			X	
5.3. Scientific/artistic and professional achievements of the higher education institution are recognized in the regional, national and international context.		X		
5.4. The scientific / artistic activity of the higher education institution is both sustainable and developmental.	X			
5.5. Scientific/artistic and professional activities and achievements of the higher education institution improve the teaching process.			X	

2. Site visit protocol

**Reakreditacija
Sveučilište u Splitu
Sveučilišni odjel za studije mora**

**Re-accréditation of the
University Department of Marine Studies
University of Split**

PROTOKOL POSJETA

Utorak, 19. studeni 2019

Mjesto događanja:

VISIT PROTOCOL

Tuesday, November 19th 2019

Venue:

Ruđera Boškovića 37, 21000 Split

	Utorak, 19. studenoga 2019.	Tuesday, 19th November 2019
09:00 - 10:00	Sastanak s Upravom odjela (v.d. Pročelnik, predstojnici studijskih programa)	Meeting with the Management (Acting Head of the Department and Heads of studies)
10:00 - 11:00	Sastanak članova Stručnog povjerenstva (Analiza dokumenata)	Internal meeting of the panel members (Document analysis)
11:00 - 11:50	Sastanak s radnom grupom koja je priredila Samoanalizu i predstavnikom Odbora za unapređenje kvalitete	Meeting with the working group that compiled the Self-evaluation and Quality Improvement Committee
12:00 - 13:00	Sastanak sa studentima (otvoren sastanak za sve studente)	Meeting with Students (open meeting)
13:15 - 14:15	Radni ručak Stručnog povjerenstva	Working lunch of the panel members
14:20 - 15:00	Sastanak s Alumnima - Alumni MORE Split	Meeting with Alumni - Alumni MORE Split
15:05 - 16:00	Sastanak s vanjskim dionicima - predstavnicima strukovnih i profesionalnih udruženja, poslovna zajednica, poslodavci, stručnjaci iz prakse, organizacijama civilnog društva.	Meeting with external Stakeholders - representatives of professional organisations, business sector/industry sector, professional experts, non-governmental organisations.
16:00 - 16.45	Interni sastanak članova Stručnog povjerenstva	Internal meeting of the panel members
16:45 - 17:15	Organizacija dodatnog sastanka o otvorenim pitanjima, prema potrebi	Organisation of additional meeting on open questions, if needed

	Srijeda, 20. studenoga 2019.	Wednesday, 20th November 2019
09:00 - 10:00	Obilazak Odjela i prisustvovanje nastavi.	Tour of the Department and attending the teaching classes.
10:00 - 13:00	Obilazak Odjela (knjižnica, uredi studentskih službi, informatičke učionice, znanstveni laboratoriji, prostorije za studente, predavaonice, nastavni laboratoriji / praktikumi, radilišta / istraživački i ribarski brod. Nastavne baze - obilazak u pratnji koordinatora za nastavne baze.	Tour of the Department (library, student services, IT classrooms, scientific laboratories, student space, classrooms, teaching laboratories / practicums, worksites / research vessel and fishing boat. Teaching bases - a tour accompanied by a coordinator for teaching bases.
13:00 - 14:00	Radni ručak Stručnog povjerenstva	Working lunch of the panel members
14:00 - 15:00	Sastanak s nastavnicima Odjela (u stalnom radnom odnosu, osim nastavnika koji su predstojnici studijskih programa i nastavnika na rukovodećim mjestima) i vanjskim predavačima s Instituta za oceanografiju i ribarstvo koji sudjeluju u nastavi Odjela	Meeting with full-time employed teachers from the Department (open meeting) except for the teachers who are the heads of the study programs and the teachers in the management positions) and lecturers from Institute of Oceanography and Fisheries who participate in teaching
15:05 - 15:35	Sastanak s predstojnicima studijskih programa Odjela	Meeting with the Heads of the studies
15:40 - 16:00	Sastanak s predstavnikom rektorata Sveučilišta u Splitu	Meeting with the representative of the University of Split Rectorate
16:00 - 16:45	Interni sastanak članova Stručnog povjerenstva	Internal meeting of the panel members
16:45 - 17:15	Organizacija dodatnog sastanka o otvorenim pitanjima, prema potrebi	Organisation of additional meeting on open questions, if needed

	Četvrtak, 21. studenoga 2019.	Thursday, 21st November 2019
09:00 - 10:00	Sastanak s voditeljima znanstvenih projekata	Meeting with the Heads of research projects
10:00 - 10:30	Sastanak s predstavnikom rektorata Sveučilišta u Splitu	Meeting with the representative of the University of Split Rectorate
10:30 - 12:00	Interni sastanak članova Stručnog povjerenstva	Internal meeting of the panel members
12:00 - 12:30	Završni sastanak s Upravom	Exit meeting with the Management

SUMMARY

The Department of Marine Studies of the University of Split has undergone profound changes over the last few years with respect to staff, facilities and academic orientation (to biotechnology from natural sciences). This was in part driven by the denial of a licence for performing higher education activities by the Ministry owing to an unfavourable ratio of permanent to external personnel, even though the State is solely responsible for releasing new posts. This awkward situation was, however, swiftly and effectively resolved, and the licence was re-issued.

The Department clearly shows a caring attitude towards its students and all members are trying hard to create good environments for learning, which are particularly strong at the 'learning centres' that the Department has forged alliances with to offer student practice. However, in many cases the Department does not show strong alignment with the standards. Examples include assessment in relation to learning outcomes, the provision of lifelong learning, provision of physical resources, development opportunities for teaching staff, and research strategy. The Panel has established that there is an internal quality assurance system, but its functionality is questionable. These issues are in part predicated on a lack of critical mass of staff with quality assurance experience and expertise, and a lack of teaching space and other resources. Taken together, these factors can prevent the formation of an internally-integrated and stand-alone Department. To achieve full compliance with the standards much more resources would be required. This does not imply by any means that the Department lacks well-educated and capable teachers who can perform research at an acceptable level.

The Panel detected considerable tension in the Department between the teaching staff and the management, which has remained unresolved for an extended period, despite awareness at the highest level of the University. Of the considerable issues identified in this report as recommendations, many are exacerbated and perhaps the result of the current departmental structure and interpersonal relationships: there is a lack of a functioning academic community of scholars. The option remains for a re-structure of the Department.

The tension within the Department is currently only marginally impinging on the internal quality assurance system, such as it is, but there is potential for escalation such that system collapse ensues, and thus there is an urgent need to consider the sustainability of the Department's executive and deliberative structures. The physical resource facilities are stretched and there may be some alleviation of the issues by the close cooperation or merger with another unit of the University. The latter might present a re-structuring opportunity. It is the management of staff and the associated administrative components of quality assurance that are in need of enhancement. Staff are working to individual agendas and need to be marshalled to create an effective critical and cohesive academic community serving the needs of their Department and its students.

Many of the numerous recommendations in this report stem directly from a lack of serious consideration of the last re-accreditation report. There is imperative for action to address the current recommendations lest reputational damage to the University, Department, and by extension its students and alumni results.

The Panel identifies a high potential for the Department to evolve into one of the leading academic units of Croatia across all disciplines, but progress is likely to involve considerable reform.