

# Assessment report on the Erasmus Mundus Master of Science in Marine Biodiversity and Conservation

## 1. Introduction

This report results from the external peer review of the Erasmus Mundus Master of Science in Marine Biodiversity and Conservation (EMBC) offered by a university consortium consisting of six universities across Europe. The review is based on criteria agreed upon in the “Assessment framework work for Joint Programmes” that was designed under the umbrella of the “European Consortium for Accreditation” (ECA) as part of the JOQAR (Joint Programmes: Quality Assurance and Recognition of degrees awarded) project. .

The University consortium under the coordination of the University of Ghent put together a Self Evaluation Report addressing the themes and criteria outlined in the Assessment framework.

The coordinating Quality Assurance Agency AQAS suggested, in cooperation with the other European participating agencies, a panel of experts to review the programme. The international panel was chosen following the principles for the selection of experts of ECA. It was approved by the Coordination Point for the JOQAR. The University Consortium did not raise any concerns with regards to the composition of the panel.

After a first review of the SER upon proposal of the chair of the panel the experts suggested to have the site visit at the University of Ghent. As coordinating University the location was deemed suitable since the location would allow interviewing students from different study paths as well as making use of the video conferencing system that is also used to coordinate the programme. The location also allowed a suitable logistical support for the requirements of the site visit. In the following days the experts exchanged open questions with regards to the criteria via email.

A first preparatory meeting of the president of the panel and the secretary took place in The Hague on 27<sup>th</sup> November 2012 to discuss the procedure and the framework as well as the panel’s need for further information regarding some criteria. This meeting took place as part of a JOQAR workshop focussing on the proper use of the Assessment framework. As a result the university consortium delivered some additional information that was delivered to the panel of experts before the site visit. This documentation included thesis reports of 15 students selected by the experts. The Panel could access the Master theses, the different assessments of the theses as well as Powerpoint-presentations and partially video streams of the presentation of these students.

The day before the site visit at the University, the president of the panel and the secretary once again met in order to prepare the structure of the discussions. In the morning of the 17<sup>th</sup> December 2012 the group of experts met for three hours for an internal discussion of the framework and to identify potential open questions to be raised during the interviews. The site visit then followed the schedule that is attached to this report (see annex.) On site, the experts interviewed different stakeholders and consulted documentation on the facilities of the different universities and a broad selection of Master theses.

The visit concluded with the presentation of the preliminary findings by the group of experts to the programme coordinators in the late afternoon of the 18th December 2012.

## 2. General overview

### 2.1. Overview of the joint programme

- Name(s) of the qualification  
Joint Master of Science in Marine Biodiversity and Conservation
- Number of credits: 120
- Specialisations: none
- ISCED field(s) of study: Life Science & Environmental Protection
- Locations: Ghent (Belgium), Bremen (Germany), Faro (Portugal), Oviedo (Spain), Paris (France), Klaipeda (Lithuania)

### 2.2. Overview of the consortium

- **Ghent University:** Double and joint Degrees in the Flemish Community of Belgium are ruled by the Decree of 4 April 2003 (Art. 94) concerning the reform of higher education, and the Decrees of 30 April 2004 (Art. 106 / Art. 95bis.1), 16 June 2006 (Art. 41 / Art. 95bis.1) and 8 May 2009 (Art. V.48/ Art. 95bis.1)
- **Bremen University:** Act of Higher Education of the Federal State of Bremen (Bremisches Hochschulgesetz, BremHG, §62 and §64), the University of Bremen issues academic degrees on the basis of exam regulations (Prüfungsordnung), which have been approved by the Rector of the University of Bremen.
- **University of the Algarve:** The decree-law nº 67/2005 of 15 March 2005.
- **University of Pierre et Marie Curie:** Decree 2005-450, 11th of May 2005, on “delivering diplomas in a context of international partnership” NOR: MENS0500862D

- **Oviedo University:** Royal Decree (Real Decreto) 1002/2010, of 5 August, Chapter III, expedition of official titles of University Masters
- **Klaipeda University:** the Order of 29 July 2011 (Art. V-1468) replacing the Order of 31 December 2009 (Art. ISAK-2833) supplementing higher education Law (Art. XI-242) delivered on 30 April 2009 and supplemented on 19 January 2012

### 2.3. Overview of relevant external quality assurance

- **Ghent University**
  - According to Flemish Law Art. 95 bis 1, master programmes that have been selected for European funding and that deliver multiple or joint diplomas are not considered as new programmes (as described in art. 60). Following Art 95 bis 1, such master programmes are accredited until the end of the second academic year following the last academic year of European recognition. For the EMBC programme this regulation implies that accreditation in Belgium (Flanders) is valid from September 2008 until September 2015.
  - Accreditation agency: NVAO
- **Universität Bremen**(Bremen University)
  - Local course programme was accredited by ACQUIN from March 2007 until 30 September 2012
  - Currently a new procedure is running with AQAS (<http://www.aqas.de/>) in order to get the accreditation prolonged
- **Universidade do Algarve** (University of the Algarve)
  - Agência de Avaliação e Acreditação do Ensino Superior (A3ES); Agency for Evaluation and Accreditation of Higher Education (A3ES) - Member of the European Consortium for Accreditation (ECA) since July 13, 2012.
  - Accreditation is valid since April 6, 2011 until academic year 2014/2015
- **Universidad de Oviedo** (Oviedo University)
  - Aneca: La Agencia Nacional de Evaluación de la Calidad y Acreditación
  - The programme is accredited since 23 July 2010
- **Université Pierre et Marie Curie** (University of Pierre et Marie Curie)
  - The Current MSc program is accredited until 1st of September 2014

- At this moment an accreditation application for 2014-2018 is in progress, the application deadline is 15th of October 2012.
- Agence d’Evaluation de la Recherche et de l’Enseignement Supérieur
- **Klaipėdos universitetas** (Klaipėda University)
  - Centre for Quality Assessment in Higher Education (SKVC) - <http://www.skvc.lt/en/>
  - The current accreditation was provided on June 22, 2010 and is valid for 6 years.

### 3. Assessment criteria

#### Standard 1. General conditions

---

##### **Criterion 1a: Recognition**

*The institutions in the consortium are legally recognised as higher education institutions and their respective national legal frameworks allow them to participate in this joint programme.  
If the joint programme awards a joint degree then this should be in accordance with the legislation governing the awarding institutions.*

##### Findings:

The six institutions in the consortium are legally recognized as higher education institutions and their respective national legal frameworks allow them to participate in this joint programme.

University of Ghent has a strong tradition in striving for international cooperation. The initiative for this programme came from its department of Biology. The executives (rector, vice rector, dean etc.) of the University clearly felt this is a good initiative to support and are also willing to do it after EU funds will be gone.

##### Conclusion and recommendations:

The consortium is very solid and criterion 1a is totally fulfilled. The panel of experts sees no need for any action in this field.

##### **Criterion 1b: Cooperation agreement**

*It is clear from both the cooperation agreement and the subsequent implementation that the partners in the consortium agree on the following points:*

- Overall coordination of the programme and/or sharing of responsibilities;
- Admission and selection procedures for students;
- Mobility of students and teachers;
- Examination regulations, student assessment and recognition of credits in the consortium;
- Type of degree (joint, multiple) and awarding modalities;

- *Teaching language(s);*
- *Coordination and responsibilities regarding internal quality assurance;*
- *Administration of student's data and performance records;*
- *Support for student mobility;*
- *Public information on the programme;*
- *Financial organisation (including sharing of costs and incomes, charging registration and/or tuition fees, grants and fellowships);*
- *Change in partnership.*

#### Findings:

The six main partners already expressed their intention to prolong the agreement for the continuation of the organization of this joint EMBC master programme. The agreement is documented in a series of annexes and signed by all partners. The agreement consists of all required components.

The Consortium is actively working on the sustainability of the programme and thus for its continuation at the time the EU subsidy ends. The University of Ghent could demonstrate experience with two other programmes where Erasmus Mundus support ended and which still exist. The consortium is confident that the agreement will continue even when the EU funds will end due to the great success of the programme and the spirit of the students. Nevertheless, the consortium is aware that raising the required fees might not be possible in all countries of the partnership.

The joint EMBC master programme is coordinated by Ghent University through a coordinator. Besides that, each participating university has appointed a local coordinator for the local organization. The EMBC programme is steered by a Management Board and supported by a Central Coordination Office for the administrative issues. In these bodies also potential needs for adjustments of the agreements are discussed. The application and selection of students are also regulated in the cooperation agreement.

The common vision of the EMBC is to combine the best expertise for students to gain the added value of a joint master, and to actively live and study in different cultures; hence mobility of the students is well structured and organized within the programme. The mobility of teachers is organized only occasionally. Courses are organized at the six Universities and the Management Board approves the full list of courses each year. Regulations on information of students and examinations are documented and published. Thesis evaluation regulations are very appropriate. For the transformation of grades the consortium agreed on a grading table. The panel observed that the table does not offer equivalents for the best grades in every grading system, making it impossible for the students to keep or reach the best grade when transferred into another country under certain circumstances.

The students are awarded a joint degree from the six universities of the consortium.

The teaching language is English.

EMBC offers an online database for the collection of student records and coordinators and administrators are given access to this database. Students can consult their scores at any time on their private EMBC student page. Local grades are eventually recalculated to a 20 point scale according to an agreed conversion table.

In each university the International Relations offices facilitate the arrival of the students at the new university by organizing a variety of activities. For specific mobility elements, students receive a budget with which they can cover the main costs. The EMBC coordination office is in charge of general communications about the programme. The information is provided using a variety of media: online media, printed media and local university press. Several students learned about the programme by information that is publicly available online and became interested as a result of this information.

#### Conclusion and recommendations:

The panel sees criterion 1b as fulfilled. At the same time the panel encourages the partners to intensify their planning with regard to the sustainability of the programme. The compulsory mobility, which is one of the obvious strengths of the EMBC, might be endangered once the students loose financial support. Additionally teacher mobility should be considered an additional value that could be encouraged even further.

The panel strongly recommends that the grading table is adjusted in order to enable all to students to achieve the highest score on the scale of 20 points.

#### **Criterion 1c: Added value**

<i>The programme can demonstrate the added value of offering this joint programme in international perspective.</i>
---

#### Findings:

The panel agreed that the programme has an unquestionably internationally added value that comes from a combination of elements that interact:

- *The nature of the programme to the higher education institutions:* The fact that each of the EMBC Master's Universities is specialized in different aspects of marine biodiversity and conservation makes it possible for the programme to be much more than the sum of its parts.
- *The internationalization of the programme:* with students from all over the world collaborating in multi-cultural teams, teachers with international backgrounds developing a

Master's programme involving six European HEIs and partner universities from all over Europe.

*The structure of the programme* gives the students the possibility to gradually specialize in an area of marine biodiversity and conservation according to his or her interests, competence and background; the requirement that the students need to attend at least two universities plus the summer school ensures that mobility is a cornerstone of the programme, which provides the opportunity to conduct specialized research and academic experience in different environments in different countries.

Conclusion and recommendations:

Criterion 1c is totally fulfilled. The panel agrees that the programme provides a step towards global citizenship to the students and that internationalization and multidisciplinary are key elements of EMBC that provide significant and complementary learning opportunities to the students in each individual institution.

However, this laudable form of internationalization makes it necessary for EMBC, as a cooperation of institutions of a multifaceted community, to continuously consider the role and the competencies of each involved actor and institution in order to avoid complexity and over-bureaucratization.

---

**Standard 2.    Intended learning outcomes**

---

***Criterion 2a:    Shared***

<i>The intended learning outcomes are developed and shared by all partners.</i>
---

Findings:

The EMBC has eleven intended learning outcomes which are:

1. Acquiring advanced knowledge and insight in the way in which marine biodiversity evolves in time and space and on different biological organizational levels.
2. Managing to conduct comparative research regarding the relation between marine biodiversity and ecosystem functioning using carefully prepared experiments.
3. Being capable to assess the value of marine biodiversity and to organize research ensuring the conservation of marine biodiversity and guarding the maintenance on a commercial and recreational level of marine biodiversity.
4. Developing a profound scientific knowledge of biodiversity and the conservation and recovery of the marine environment.

5. Possessing advanced practical skills in the knowledge of marine biodiversity and its conservation.
6. Taking on a responsible role in a team. Performing a bridging function between research and professional field.
7. Consulting independent specialized sources. Putting a problem regarding the field of marine biodiversity into a scientific question, designing and carrying out research according to the accepted scientific criteria.
8. Being able to present and report the results of (one's own) research to fellow scientists and laymen.
9. Adopting a positive attitude toward lifelong learning and continual evaluating of the personal scientific understanding and acts.
10. Confronting the knowledge of the field and the results of scientific research with the social and ethical context.
11. Succeeding in applying the knowledge and skills acquired in the framework of international mobility.

These learning outcomes were updated and re-confirmed in the EMBC Management Board meeting of July 2012. They apply to different cognitive abilities and comply entirely with the Dublin descriptors. The MB discusses the goals and scope of the courses, and their relation with the learning outcomes of the programme annually. Resulting from the discussions in Ghent, the panel believes that the views on the course are well shared and endorsed by all partners. During the site visit, the shared feelings for scope and goals of the programme and the joined enthusiasm were inspiring.

Conclusion and recommendations:

The criterion is fulfilled excellently. The intended learning outcomes are developed and shared excellently by all partners.

**Criterion 2b: Level**

*The intended learning outcomes align with the corresponding level in the Framework for Qualifications in the European Higher Education Area (the so-called Dublin descriptors) or the European Qualifications Framework.*

**Findings:**

The learning outcomes align well with the corresponding level in the Framework for Qualifications in the European Higher Education Area and the Dublin descriptors. However, it is somewhat difficult to extract



a common vision and focus of the programme from the learning outcomes only. The relation with the assumed core goals of the programme, e.g, biodiversity and conservation, and some of the learning outcomes was not very clear in the documentation. The balance between higher and lower cognitive abilities could be strengthened towards the first to underline the level of the programme. Also it became clear that there is some overlap between the focus of some learning outcomes (e.g. 1. and 4.)

Conclusion and recommendations:

The panel considers the criterion as fulfilled. The programme is typically developed by a group of highly motivated experts in marine biology and marine sciences who share their enthusiasm for marine biodiversity and conservation. The programme is completely in line with the level of the Dublin Descriptors. Yet, further improvement could still be achieved if the Management Board of the programme would put a bit more emphasis on the higher cognitive abilities when further developing the learning outcomes. They could possibly benefit from an exercise whereby the intended cognitive abilities and learning outcomes are matched by a critical analysis and review of the exam questions for the respective subjects in the programme.

**Criterion 2c: Subject/discipline**

<i>The intended learning outcomes comply with the requirements in the subject/discipline and, where applicable, the professional field.</i>
---

Findings:

The disciplines in question in EMBC are extremely broad and so is the offer of the programme. While the learning outcomes comply with disciplinary questions, skills and attitudes, yet, the inspiration from the professional field, e.g. conservation managers, working in interdisciplinary teams, negotiating-capabilities, balancing competing claims, is not absolutely clear. The transmitted knowledge and skills in the EMBC programme are technical and focus on biological disciplines. While from an academic point of view, this is certainly defensible, yet, in society, alumni will have to deal with multidisciplinary teams and non-scientific but societal arguments. Training in these interdisciplinary approaches is certainly a requirement that the professional field could expect from alumni of the EMBC programme, but currently these competencies can only be found on a more implicit level.

Conclusion and recommendations:

The criterion is fulfilled. Training in interdisciplinary approaches that further reflect the requirements in the field of conservation would be recommendable.

### **Standard 3. Programme**

---

#### **Criterion 3a: Admission**

*The admission criteria and selection procedures are in line with the joint programme's level and discipline.*

##### Findings:

The selection, performed by the programme coordinators, is generally based on the written applications, only in rather rare cases of ambiguous qualification, oral interviews are foreseen. Since the maximum number of possible acceptances of qualified applicants has so far never been exceeded, rankings among potentially qualified applicants are not yet needed. The variety of different backgrounds of the individual students poses a challenge for first level Master Course classes, which seems to be sufficiently dealt with, even though students see this as one of the difficulties when entering the programme. From the self-evaluation report it was not fully clear what the minimum requirements are in terms of language skills. This was further clarified in the discussions with the programme coordinators and appears adequate to the panel, since C1 or TOEFL-certificates are seen as a minimum requirement. Overall it seems that the selection procedures are adequate and result in the recruitment of highly motivated and sufficiently skilled students.

##### Conclusion and recommendations:

The quality and motivation of the students entering the programme is one of the major strengths of this programme. Therefore the admission criteria and selection procedures appear well thought-through and fully functional. The criterion is clearly fulfilled.

#### **Criterion 3b: Structure**

*The structure and content of the curriculum and its pedagogical approach correspond with the intended learning outcomes.*

##### Findings:

The general programme structure, where students spend their first year in one of the 3 "year-1-Universities" (Ghent, Bremen or Algarve) and then move for their third semester to one of the "year-2-Universities" (Oviedo, Paris or Klaipeda) where they can also stay for the fourth semester or choose any other of the partners, is well defined and fully comprehensible. The overall diversity of topics covered in

the programme is impressive and clearly defined as one of the strengths of the programme. This diversity allows the students to specialize according to their personal skills and interests. However also due to the diversity of offered courses in all the participating universities, a clear link between the content of the curriculum and the defined learning outcomes is less obvious. Although it is highly appreciated that the programme coordinators set up a system of individual guidance of students according to their skills and interests, clearly formulated guidelines with at least exemplary pathways leading to different specializations are currently not available to facilitate students not only the choice of specific course packages, but also to allow potential candidates to a priori select the best sequence of attended universities. Concerning the provided list of courses, course type information could be better elaborated together with the course descriptions. An issue that should be more emphatically dealt with is the strategic vision behind the programme and its effects on structure. The programme title “Erasmus Mundus Master of Science in Marine Biodiversity and Conservation” implies a strong focus in conservation aspects, including training in fields of socio-economy, stakeholder engagement, policy-making, etc. Although courses dealing with these issues are offered at least in some of the participating universities, a general prioritization of applied aspects of biodiversity research is less obvious. Pedagogically the approach of the programme corresponds with what could be expected from a Masters programme, delegating key responsibilities to the students, empowering them to take responsibility for their study success.

#### Conclusion and recommendations:

Criterion 3b is fulfilled. In general, the programme structure and the pedagogical approach are comprehensible and, through the diversity of offered courses, allow the students to specialize according to their personal skills and interests. To facilitate students their choice of relevant course packages for an intended learning outcome, clearly formulated guidelines with at least exemplary pathways leading to different specializations would be helpful. Concerning the provided list of courses, course type information should be better elaborated together with the course descriptions. With regard to a continuation of the programme through EMBC+, a reconsideration of the general structure could be discussed, whereby more room given to the thesis would be an option.

Nevertheless, it is not entirely clear to the panel to what extent students can freely choose which partner university to go to in the second year, and whether they are always offered what they want. A choice based on content is generally balanced by considerations regarding university and country.

**Criterion 3c: Credits**

*The distribution of credits is clear.*

**Findings:**

Sufficient courses need to be available at each university to ensure that students can complete a minimum number of credits each semester. This requirement is obviously fulfilled and even exceeded, since the number of courses offered by each of the universities is impressive, also due to the fact that most of the courses are offered in parallel with local master programmes. Each of the courses leads to credits based on the workload of an average student. Also the distribution of credits between the universities is clear. Nevertheless sometimes language can become an issue when local students follow some of the courses offered in this programme resulted in a limited offer to EMBC students or conflicts in regard to teaching language.

**Conclusion and recommendations:**

The criterion is fulfilled. Due to the fact, that each of the participating universities offers a variety of courses, the distribution of credits is clear and needs no further modification.

**Standard 4. Internal quality assurance system****Criterion 4a: Common understanding**

*There is a common understanding of the internal quality assurance system for this joint programme in which responsibilities are clearly shared and coordinated.*

**Findings:**

Each of the six universities plays an equal role in the internal quality assurance system. The following organizational arrangements are installed with equal representation and responsibility of each of the partners: Management Board, Examination Board, the common Selection Committee, and Student Board. The consortium also supports a Coordination office based in Ghent. The understanding of the internal quality assurance system is shared among the partners. During the interviews in Ghent the different stakeholders could outline different examples where the internal quality assurance system worked well. The panel specifically asked for cases where students faced problems e.g. with mobility or course requirements and concludes that the measures taken were appropriate. At the same time it should be mentioned that the discussions could reflect that the different mechanisms in the different

universities work well. A common systematic approach that unites the partners on a program level is not yet strongly established.

Conclusion and recommendations:

The panel sees criterion 4a fulfilled. Problems have been solved quickly and properly. The degree of coordination on the level of individual problems seems to be high. While continuous enhancements have been introduced in the programme as a whole and in its application in the various participating institutions, at this stage of the programme implementation adoptions and improvements might seem a little bit based on improvisation not yet on the systematic analysis and review of the programme as such. To do so, the programme should consider developing a more systematic internal quality assurance system to be applied on the Master as a whole. This internal quality assurance system should be the same for all the participating universities.

Currently a focus lies on the different perspectives by the contributing universities and the high level of motivation by the involved staff helps to solve problems. With regards to sustainability a more unified approach towards internal QA could be helpful. The programme would benefit from a more systematic and defined internal quality assurance system with common procedures to ensure transparency, continuous improvement and accountability.

**Criterion 4b: Stakeholder involvement**

<i>The stakeholders (students, staff, employers, graduates, etc.) are involved in the internal quality assurance activities (including graduate surveys and employability issues).</i>
--

Findings:

Internal quality assurance mechanisms are implemented at different levels (course and programme level) through means of quality assessment surveys, which are performed anonymously. At course level each university is responsible for the quality of its own teaching, and at programme level, the coordination office and the management board compile the information provided by student surveys.

At local level, students are involved in course evaluations. Staff and research assistants are mainly involved in practical training, seminars and field excursions and evaluation of students' achievement. Until today alumni were involved in the quality assurance once with a survey regarding employability. A systematic involvement of employers is not yet in place.

Conclusion and recommendations:

The panel sees criterion 4c fulfilled. The quality assurance system should put a stronger focus on systematic stakeholders' involvement and surveys (students, staff, employers, alumni, etc.) While

students and staff as well as alumni are currently involved, the lack of involvement of potential employers should be addressed in the future.

**Criterion 4c: Continuous improvement**

<i>The effectiveness of the system with regard to the continuous improvement of the programme can be demonstrated.</i>
--

Findings:

From the panel's perspective, EMBC has different mechanisms for its continuous review in place, both internally and externally. From an **external** point of view the programme has been subject to different quality assurance procedures from the onset, in the context of Erasmus Mundus and national accreditation requirements in the EMBC countries (Belgium, Germany, France, Portugal, Lithuania and Spain). Since its creation the programme has been externally assessed by the following institutions: NVAO, AQAS, ANECA, AERES and SKVC. All these procedures followed the applicable national frameworks and thus could only consider the totality of the programme with a limited scope.

**Internally** speaking, the panel was informed during the site visits that there are different mechanisms in place that monitor the quality of the programme. The most important common mechanism is the Management Board as the responsible body for the quality assurance of the programme. It is in charge of the constant monitoring of the programme quality, professional profile, and continuous curriculum development assuring that the learning activities among the network are coordinated in a manner that corresponds to the programme profile.

Students evaluate the programme at the end of each year using surveys. When interviewed by the panel the students mentioned that they have the feeling that their evaluations are of limited use since they rarely receive any feedback on the impact of their suggestions for improvement or if they are really analyzed and taken into account. This was also the reason why students outlined a low level of participation in these surveys. It was also brought to the attention of the panel that direct criticism directed to the coordination office is always taken seriously and reactions are visible as a result of the intervention.

Conclusion and recommendations:

The criterion on continuous improvement is fulfilled. The programme refers mainly to positive external evaluations that support a beneficial development of the programme, in the sense that the areas of improvement identified by external bodies can be integrated for the enhancement of the programme. It became obvious that the modules of the programme are addressed in self-evaluation processes that testify to the programme's willingness to improve. It was obvious that the methods in use for

continuous improvement are strongly based on the motivation of the staff and could be more systematic on the programme level.

The panel is convinced that an improved programme-wide internal quality assurance system shall be considered. This means a more formal documented system that specifies and integrates the processes of control, periodic review and continuous enhancement of the programme.

The panel is aware that the consortium has already undertaken various efforts towards continuous improvement and on the ground it is obvious that currently the high level of staff motivation allows addressing all aspects appropriately, but the system is not yet fully documented and currently strongly based on the high level of staff motivation and involvement. A more formalized structure might help the programme in the future to keep the results of the many initiatives that the programme takes to embark upon a standardized, continuous internal review.

#### **Standard 5. Facilities and student support**

---

##### **Criterion 5a: Facilities**

<i>The facilities provided are sufficient and adequate in view of the intended learning outcomes.</i>
---

##### Findings:

With respect to facilities, it needs to be mentioned that the site visit took place at the University of Ghent and no physical visit was carried out at the other universities where the joint Master of Science is run. At the University of Ghent the facilities are fully appropriate with different types of equipment available which are all state of the art. The labs are well equipped with resources and students are satisfied with the available resources. Ancillary facilities such as meeting places, which are also vital for the academic community, are also available and all stakeholders were satisfied with the resources.

Various video clips and photo clips from the different universities were made available to the panel and during the site visit students and staff from the different partner universities were specifically interviewed with regards to the facilities via teleconferencing and skype. All available communication media also confirmed that the facilities of the other universities are excellent and students have all the resources they need to conduct research and share information irrespective of their duty station. EMBC also makes use of a Facebook site and other social media not only to inform students but to allow communication amongst each other, participate and create a spirit to belong to a community.

Online and virtual resources are also to be commended for all universities.

##### Conclusion and recommendations:

The criterion on facilities is fulfilled. Meetings with the different stakeholders including heads of the Universities, Programme Coordinators, Academic Staff and the students clearly showed that there were no problems with facilities.

Additionally the panel recognizes the challenges for the equipment or facilities caused by an international group of students. Signalling and labelling in offices and buildings might be challenging if not available in English language for students unfamiliar with the language of the country they are in. This point is also valid from a health and safety point of view.

**Criterion 5b: Support**

<i>Student support provided by the joint programme contributes to the achievement of the learning outcomes and, where applicable, to designing individual study pathways.</i>
---

Findings:

Based on the SER and the interviews held during the site visit there are different types of support available to the students. It is a clear aim of the coordinators to support students by providing easy access and a transparent overview of the course catalogue to allow students to create a well-balanced study programme. The panel could observe that the number of courses offered in the program sometimes challenges the aim of transparency. Student support also includes that contact details of the teachers are provided on the website to foster communication. Additionally there is support by personal contact of the EMBC Practical Coordinator: At the start of the programme the practical coordinator visits all first year university students in order to give them correct information on the full course programme, on selection of courses, etc. At that time students are also explained the details of the student contract, which contains sections about course selection, study programme, and exam regulations.

Further support level that were also discussed during the site visit was the support by communication with the EMBC Management Board, the support at course level, and the flexible organization of resits, as well as specific support for students with handicaps.

During the discussions it also became obvious that the universities have created a culture of support between students themselves and between current students and alumni. This is also thanks to social networking endorsed by the universities. To students this is of such great importance that they also consider this to be one of the strengths of the programme.



#### Conclusion and recommendations:

The criterion on support is fulfilled. Meetings with the different stakeholders including heads of the Universities, Programme Coordinators, Academic Staff and the students clearly showed that student support is a big strength of the programme. With regards to the substance of the programme and the choice of courses a more effective and potentially mandatory counselling should be considered. Since the broad choice of courses is a clear strength of the programme it also requires the students to make wise choices, which sometimes they might find difficult to take with many different information combined with a low level of experience at hand.

#### **Criterion 5c: Services**

<i>The programme provides adequate student services to facilitate mobility (e.g. housing, guidance for incoming and outgoing students, visa issues, etc.).</i>
--

#### Findings:

The EMBC coordination office is, for general issues, the first point of contact for students. Students receive information about the programme, administrative issues, insurance matters, visa support, etc. A regular updated practical guide helps the students in organizing their lives upon arrival. Through the private student pages on the EConsort platform (electronic platform used by all partner universities that is also open to students to share documents and information), supporting letters for visa and documents are made available to all students. The coordination office is also in charge of the organisation of joint events (thesis event and summer school). On these joint events, accommodation, meals and transport are provided and centrally organised.

This central service is supported by different services available at the various partner universities. Here the level of service differs depending on the academic culture of the university. For example, the provision of accommodation is handled very differently at different locations and this makes it harder for the students to adjust. It could also be recognized that the level of assistance upon arrival at a new location differs between the universities. Overall the panel noted with satisfaction the numerous services provided by the different universities. Considering the mobility of students from one university to another and the positive comments made by the students in this field, this is to be considered as a strength in the programme.

#### Conclusion and recommendations:

The criterion on service is fulfilled. Even if this is already given due attention, the panel outlines the importance of support on accommodation. Depending on the university accommodation is not provided

directly through the university and since mobility is one important factor for the success of the programme this remains a challenge for some students.

Whereas universities such as the University of Algarve organise welcome and integration events, this is not yet the case at all destinations. The panel shares the view expressed by some of the students that such social integration events are very important when students move from one university to another.

---

**Standard 6. Teaching and learning**

---

**Criterion 6a: Staff**

*The composition of the staff (quantity, qualifications, professional and international experience, etc.) is adequate for the achievement of the intended learning outcomes*

**Findings:**

In each of the six EMBC partner universities, highly qualified academic staff (minimum post-doc level) is teaching in the EMBC programme. Details of the qualifications of each of these staff members were documented in the SER. All this information is also available on the EMBC website, in order to increase transparency when students select their course curriculum. In total, 227 staff members are involved in the programme.

The panel anonymously agrees that the staff is not only qualified but also highly motivated. Precisely this combination of motivation and enthusiasm that the panel could experience not only in Ghent but also via teleconference with all other five partners is needed to inspire students. The panel is convinced that it is also the spirit and quality of the teachers that makes this programme successful. However, specifically when considering that much of the extra work happens on a voluntary base, since the programme is supported by very motivated teachers this also creates the risk for the program resulting from a potential loss of key actors that will then lead to a decreasing quality. This risk could be addressed by making some of the procedures and mechanisms more systematic and documented to facilitate a change in persons.

Most of the teachers have international experience, are fluent in English and seem to have strong acquaintance with the professional field.

**Conclusion and recommendations:**

The criterion on staff is clearly fulfilled.

**Criterion 6b: Assessment of students**

*The examination regulations and the assessment of the achievements of learning outcomes are applied in a consistent manner among partner institutions and oriented to the intended learning outcomes.*

**Findings:**

The regulations for examinations are clear and consistent among partners. The programme has developed a system to match courses with learning outcomes for each individual student, so that each student achieves all learning outcomes in his/her personal learning path. The major elements to test the learning outcomes in the programme, e.g., the assessment of the thesis projects are done centrally in Ghent, while supervisors and teachers can attend the assessment via videoconference. Regular meetings of teachers and the MB assure that the evaluations are done in a consistent manner and that all teachers involved share the overall assessment of a student. During the discussions it was also made clear that within the MB there are even discussions about different grading cultures at the different partner universities and how this affects fair assessment. A table to transfer grades from one system to another has been introduced.

However, as mentioned in the review of criterion 2, the committee had the impression that there was a risk for overemphasizing low cognitive learning outcomes compared to higher and complex cognitive learning outcomes in the way of examination. An exercise whereby specific exam questions for each course are analysed and assessed on the level of their cognitive testing and compared with the intended learning outcome of that specific course would enable to falsify (and when relevant to correct) the mentioned impression.

**Conclusion and recommendations:**

The criterion is fulfilled. Overall, the assessment of the students is in line with the intended learning outcomes, and consistent among partners. Yet, the panel recommends the MB of the programme to analyse this overall judgement for each individual course (or at least of the most important courses in the programme) to further improve the quality of assessment.

**Criterion 6c: Achievement**

*The programme can demonstrate that the learning outcomes are achieved.*

**Findings:**

About 40 % of the students had one resit for one or more courses; and following the statistics of EMBC 95 % of the students finished their master thesis in due time. This demonstrates that while the programme has high standards it allows for a successful completion.

The majority of EMBC alumni are employed with a full-time contract (63%) or part-time (16%) contracts. Most (42%) are employed as PhD students in the public academic sector, and another 28% describe themselves as employees in research (private or public), pharmaceutical industry, teaching or IT positions. A small number (10%) works as independent consultants (part-time or full-time), mostly for academic research projects. From an external perspective the panel agrees that these figures underline that the programme achieves the goal to produce employable alumni.

Overall, the programme also demonstrated that the learning outcomes are achieved. A main instrument is the module structure of the programme whereby each module caters for a specific group of learning outcomes. Students are capable to monitor the progress in their personal development of learning outcomes/competences and to which extent they completed each of the modules via their personal page on EConsort. Also a review of the selected and available master theses demonstrated that the learning outcomes were achieved.

#### Conclusion and recommendations:

The criterion is fulfilled. EMBC developed a proper system to safeguard the achievement of the learning outcomes, whereby students receive responsibility for their own study path. This is strongly monitored via the EMBC digital service and followed by the teachers in their annual board meetings. The newly incorporated system that outlines which course covers which learning outcome will further facilitate the process of monitoring the achievement of all learning outcomes for each student.

### **Standard 7. National component (Flanders, Belgium)**

---

*In order to assess criterion 6c regarding the achievement of learning outcomes, the assessment panel is required to look at students' work which, according to the joint programme (and indicated in the self-evaluation report), demonstrate that their graduates achieve the intended learning outcomes. Students' work can here refer to a final thesis but also to other products (work of art, portfolio, etc.).*

*The assessment panel should select, randomly and differentiated by marks achieved, fifteen students from a list of graduates for the last two completed academic years. For each student selected, the panel examines the meaningful students' work, including the completed and signed assessment forms. These documents will be supplied by the programme prior to the site visit.*

#### Findings:

Following the requirements of the National component of Flanders the expert panel received a list of students and their thesis work of the last two years of the programme as an annex to the SER. Based

upon this list the experts chose the work of 15 students from different fields of the domain also reflecting different levels of work quality. Two weeks in advance of the site visit the panel received online access to the student work of the selected students. This included the Master thesis, the assessment through the academic staff as well as the presentation based on the thesis as either slideshow or video of the presentation. Also during the site visit the experts used the time reserved to review the documentation to discuss the level of achievement reflected by student work.

#### Conclusion and recommendations:

The procedure has been followed and substantive results have been included in the assessment of Standard 6 teaching and learning.

### **Standard 8. National component (Germany)**

---

#### *8a. Transparency*

*The study programme, course of study, examination requirements and the prerequisites for admittance including the regulations for compensating disadvantages of handicapped students are documented and published.*

#### Findings:

The public availability of information with regard to the programme including the course of study, the examination requirements, admittance procedure and regulations for compensating disadvantages of handicapped students could be confirmed in advance and during the site visit.

#### Conclusion and recommendations:

The criterion is fulfilled.

#### *8b. Equal opportunity*

- a. Regulations are provided for compensating disadvantages of handicapped students;*
- b. The interests of handicapped students are taken into consideration throughout the study process;*
- c. Compensating disadvantages of handicapped students with regard to time-related and formal guidelines in the studies as well as in the final performance tests and those during the studies is ensured;*
- d. The concepts of the Higher Education Institution for gender justice and for the promotion of equal opportunities of students in special situations such as students having health impairments, students having children, foreign students, students with migration background and/or from so-called educationally disadvantaged classes are implemented at the level of the programme.*

#### Findings:

Within the EMBC programme, no official requests for compensation of disadvantages of handicapped students have been submitted, while regulations are in place at all participating universities as

documented in annex 25 of the SER. In case students face difficulties (for instance if some students do not have the right skills for diving/ swimming for field work during the summer school), students have the first priority for the selection of other tasks. Regarding gender balance, on a yearly basis the programme has between 40 % males and 60 % females. Students with children have facilities for crèches, and flexibility in some practical class work. It has been discussed in the site visit that these cases did not happen yet but based on the impression gained also during the discussion with the students the experts are convinced that in case such support is required the programme coordinators will be helpful in finding a adequate solution.

#### Conclusion and recommendations:

The criterion is fulfilled.

#### *8c. Formal requirements regarding the length and content of studies*

- a. The standard period of study for full-time study amounts to four, three or two semesters for Master's programmes;*
- b. A Master's qualification requires 300 ECTS credits including the preceding programmes for the first qualification for entry into a profession. This requirement may be waived in special cases where students can demonstrate that they are suitably qualified;*
- c. Master's programmes require a dissertation, the purpose of which is to demonstrate the ability to deal independently with a problem in the relevant subject area on the basis of academic methods within a set period of time.*
- d. The Master's dissertation should range from 15 to 30 ECTS credits.*
- e. A module (which may comprise content taught within one semester or academic year, or extend over several semesters) is generally concluded with one examination and should account for at least five ECTS credits.*

#### Findings:

The EMBC programme equals 120 Credit Points. Admission is given based on an entrance level of a BSc of 180 Credit Points. A thesis of 30 Credit points is prepared. To fulfill the contradicting national requirements in Portugal, students there have to do an additional work that is also integrated in the curriculum. The duration of the EMBC master programme is four semesters. Generally a module concludes with one examination. The experts found a variety of different forms of examinations that were found adequate in the same way as the appropriate size of the modules.

#### Conclusion and recommendations:

The criterion is fulfilled. The experts recognize that the criterion on the workload of the Master thesis contradicts the criterion on the same issue in the Portuguese framework. The programme manages well to bridge these different requirements.

*8d. Formal requirements regarding consecutive or further education programmes*

- a. Master's programmes should be assigned to one of the categories "consecutive study courses" or "study courses providing further education".*
- b. Consecutive master's programmes are to be structured as study courses which consolidate or extend knowledge, are multi-disciplinary or cover a different subject.*
- c. Further education programmes require qualified practical professional experience of, as a rule, no less than one year.*
- d. The content of the Master's programmes providing further education should take professional experience into account and build on it.*

Findings:

The programme is a consecutive study course that consolidates and extends knowledge.

Conclusion and recommendations:

The criterion is fulfilled.

**Standard 9. National component (Lithuania)**

---

- 9a The programme aims and learning outcomes are publicly available;*
- 9b The assessment system of students' performance is publicly available;*
- 9c The curriculum design meets legal requirements;*
- 9d The study programme is provided by the staff meeting legal requirements;*
- 9e The higher education institution creates conditions for the professional development of the teaching staff necessary for the provision of the programme.*

Findings:

The learning outcomes and the common system of assessment of the programme are publicly accessible. Based on the discussions with the programme coordinators as well as teaching staff it is documented that the curriculum as well as the staff teaching in the programme meets the legal requirements. None of the experts is familiar with the Lithuanian law and for this reason this assessment is based on the explanations of the discussion partners on site. In all six universities conditions are created for professional development of the teaching staff.

Conclusion and recommendations:

The criterion is fulfilled.

**Standard 10. National component (Portugal)**

---

- 10a The number of ECTS credits attributed to the joint master's programme must be in the range from 90 to 120 credits;*
- 10b The curriculum should include an original dissertation or project, worth at least 35% of the total number of credit units (e.g. 42 credits in a programme of 120 credits);*
- 10c The majority of the academic staff must hold a PhD degree (for a joint master's programme offered with a Portuguese university) or be a PhD holder or a specialist (for a joint master's programme offered with a Portuguese polytechnic).*

Findings:

The EMBC equals 120 CP and the staff meets the requirements with regard to their qualification. The curriculum includes a research project, of which the master thesis is a part. In this combination it equals more than 42 CP of the curriculum. This curricular solution allows meeting the contradicting criteria in the Portuguese and German frameworks and has been discussed extensively during the site visit.

Conclusion and recommendations:

The criterion is fulfilled.

#### **4. Final conclusions and recommendations**

Based on the well-prepared self-evaluation-report and the discussions in Ghent, the panel is impressed by the high quality of the programme that is carried by a highly motivated group of professors and teachers. It became very obvious in the discussions that the responsible people in the programme strive towards constant improvement thus leading to a very constructive atmosphere during the site visit. The panel of experts clearly values the impressive efforts undertaken by the different departments in putting together a competitive programme by combining their different fields of expertise offering students an added value also on the substantive level.



### General Conditions

The panel sees all conditions of this theme fulfilled. All partners have legal recognition in their respective countries. A proper cooperation agreement features regulations in all required fields. An added value can clearly be defined not only on the cultural but also on the substantive level. The panel encourages the partners to intensify their planning with regard to the sustainability of the programme. The compulsory mobility, which is one of the obvious strengths of the EMBC might be endangered once the students lose financial support. Additionally teacher mobility should be considered as an additional value that could be encouraged even further. The panel strongly recommends that the grading table is adjusted in order to enable all students to achieve the highest score on the scale of 20 points.

### Intended learning outcomes

The intended learning outcomes are developed and shared excellently by all partners. The programme is typically developed by a group of highly motivated experts in marine biology and marine sciences who share their enthusiasm for marine biodiversity and conservation. The programme is completely in line with the level of the Dublin Descriptors. Yet, further improvement could still be achieved if the Management Board of the programme would emphasize more the higher cognitive abilities when further developing the learning outcomes. They could possibly benefit from an exercise whereby the intended cognitive abilities and learning outcomes are matched by a critical analysis and review of the exam questions for the respective subjects in the programme.

Training in interdisciplinary approaches that further reflect the requirements in the field of conservation would be recommendable.

### Programme

The quality and motivation of the students entering the programme is one of the major strengths of this programme. Therefore the admission criteria and selection procedures appear well thought-through and fully functional. The criterion is clearly fulfilled.

In general, the programme structure is comprehensible and, through the diversity of offered courses, allows the students to specialize according to their personal skills and interests. To facilitate students their choice of relevant course packages for an intended learning outcome, clearly formulated guidelines with at least exemplary pathways leading to different specializations would be helpful. Concerning the provided list of courses, course type information should be better elaborated together with the course

descriptions. With regard to a continuation of the programme through EMBC+, a reconsideration of the general structure could be discussed, whereby more room given to the thesis would be an option.

It is not entirely clear to the panel to what extent students can freely choose which partner university to go to in the second year, and whether they are always offered what they want. A choice based on content is generally balanced by considerations regarding university and country, and the distribution of students amongst second group universities is not so clearly defined.

Due to the fact, that each of the participating universities offers a variety of courses, the distribution of credits is clear and needs no further modification. The challenges of language in the selection of courses should not be underestimated.

#### Internal quality assurance system

The panel sees this theme as fulfilled. Problems have been solved quickly and properly on an individual level. The degree of coordination seems to be high. The panel recommends having more systematic procedure defined on how the quality is commonly assured on the level of the programme. Currently a focus lies on the different perspectives by the contributing universities and the high level of motivation by the involved staff helps to solve problems. With regards to sustainability a more unified approach towards internal QA could be helpful. The programme requires an internal quality assurance system with common procedures to ensure transparency, continuous improvement and accountability that also includes external stakeholders, especially employers.

While the consortium has already undertaken various efforts towards continuous improvement and on the ground it is obvious that currently the high level of staff motivation allows addressing all aspects appropriately, the system is not yet fully documented and currently strongly based on the high level of staff motivation and involvement. A more formalized structure might help the programme in the future to keep the results of the many initiatives that the programme takes to embark upon a standardized, continuous internal review.

#### Facilities and student support

The panel is convinced that student support is a big strength of the programme. With regards to the substance of the programme and the choice of courses a more effective and potentially mandatory counselling should be considered. Since the broad choice of courses is a clear strength of the programme it also requires the students to make wise choices, which sometimes they might find difficult to take with many different information combined with a low level of experience in hand.

Additionally the panel recognizes the challenges caused by an international group of students to the equipment of facilities. Signalling and labelling in buildings, or in public announcements etcetera, (for example with regard to fire alarms, or safety regulations and so on) might be challenging if not available in English for students unfamiliar with the language of the country they are in. Even if this is already given due attention, the panel outlines the importance of support on accommodation. Accommodation is not at each of the partner universities provided directly through the university. Since mobility is one important factor for the success of the programme this remains a challenge for some students.

#### Teaching and staff

The quality and high motivation of staff is clearly an outstanding strength of the programme. Also the assessment of the students is in line with the intended learning outcomes, and consistent among partners. Yet, the panel recommends the MB of the programme to analyse this overall judgement for each individual course (or at least of the most important courses in the programme) to further improve the quality of assessment with orientation of the learning outcomes.

EMBC developed a proper system to safeguard the achievement of the learning outcomes, whereby students receive responsibility for their own study path. This is strongly monitored via the EMBC digital service and followed by the teachers in their annual board meetings. The newly incorporated system that outlines which course covers which learning outcome will further facilitate the process of monitoring the achievement of all learning outcomes for each student. This should be closely observed to make sure the learning outcomes are achieved.

#### National components

The panel agrees that the requirements of all national components are fulfilled. With regards to the level of fulfillment the panel agreed to not differentiate between the different levels. It shall be outlined that some of the national components contradict each other creating an additional burden to the programme to find ways to structure the programme in a way that allows the fulfillment of the requirements without increasing the quality of the programme. Also it shall be mentioned that some of the criteria could only be assessed by asking the university if the criteria were considered while arranging the programme. The formulation of these criteria made an assessment through the panel hardly possible.

Standard	Criterion	Level of fulfilment			
		Excellent	Good	Satisfactory	Unsatisfactorily
1.General conditions	1a. Recognition		X		
	1b. Cooperation agreement				
	1c. Added value				
2.Intended learning outcomes	2a. Shared		X		
	2b. Level				
	2c. Subject/discipline				
3.Programme	3a. Admission		X		
	3b. Structure				
	3c. Credits				
4.Internal quality assurance system	4a. Common understanding		X		
	4b. Stakeholder involvement				
	4c. Continuous improvement				
5.Facilities and student support	5a. Facilities	X			
	5b. Support				
	5c. Services				
6.Teaching and learning	6a. Staff		X		
	6b. Assessment of students				
	6c. Achievement				
7.National component (Flanders, Belgium)	Student work	x			
8.National component (Germany)	8a. Transparency	x			
	8b. Equal opportunity	x			
	8c. Length and Content	x			
	8d. Further or Consecutive				
9.National component (Lithuania)	9a. Aims and outcomes	x			
	9b. Assessment method	x			
	9c. Curriculum design	x			
	9d. staff	x			
	9e. professional develop.	x			
10. National component (Portugal)	10a. ECTS	x			
	10b. Thesis project	X			
	10c. staff	x			

## 5. Annexes

### Annex I – schedule of the site visit including the list of discussion partners

**17.12.2012**

#### **14.00 – 15.00      Discussion with the heads of the Universities / academic units**

Ghent:

- Prof. Dr. Kris Versluys (Director of education Ghent University)
- Prof. Dr. Paul Matthys (Director of education, Faculty of Sciences)
- Prof. Dr. Herwig Dejonghe (Dean Faculty of Sciences)

Algarve:

- Prof. Dr. Margarida Castro (as president of our Department)
- Prof. Dr. Teresa Cerveira Borges (pro-rector, head of mobility office)

Bremen:

- Prof. Görg: Vice-Rector for International Affairs
- Dr. Lang: Head of International Office
- Mrs. Pechtold: Responsible person in rectorate for quality insurance and accreditation
- Prof. Diekmann: Dean for Study Affairs at Faculty 2: Biology & Chemistry

Klaipeda:

- Prof. Dr. Zita Gasiūnaitė (Director of our Research and planning institute)
- Prof. Dr. Darius Daunys (Head of Ecology department)

Oviedo:

- Prof. Dr. Juan Manuel Marchante Gayón: Head of the Quality Department, Vicerrectorate of Professors and Academic Accreditation
- Susana Menéndez Bustillo: Staff of the International and Postgraduate Vicerrectorate
- Prof. Dr. Jose Luis Acuna: Local Coordinator for the EMBC programme

## **15.15 – 17.15      Discussion with the Programme Coordinators of the Universities and administrative support, international offices etc.**

Ghent:

- Prof. Dr. Magda Vincx (Programme coordinators)
- Dr. Tim Deprez (Programme coordinators)
- Andries Verspeeten (International Office)

Algarve:

- Prof. Dr. Karim Erzini, (Programme coordinators)
- Prof. Dr. Alexandra Chicharo (Programme coordinators)

Bremen:

- Dr. PD. Holger Auel (Programme coordinators)

Klaipeda:

- Prof. Dr. Nora Venslovaitė (The Director of International office)
- Dr. Marija Katarzyte – Local EMBC responsible

Paris:

- Prof. Dr. Jean-Marc Guarini

Oviedo:

- Prof. Dr. José Luis Acuña: Coordinator and professor of the EMBC in Oviedo
- Prof. Dr. Eva García: Professor and responsible for the EMBC+ in Oviedo

## **18.12.2012**

### **08.30 – 10.15      Discussion with the academic staff of the programme**

Ghent:

- Dr. Marleen De Troch
- Prof. Dr. Olivier De Clerck

Algarve:

- Prof. Dr. Ester Serrão
- Prof. Dr. Ana Barbosa

Bremen:

- Prof. Dr. Jens Harder
- Prof. Dr. Wilhelm Hagen

Klaipeda:

- Prof. Dr. Vitalij Denisov,
- Prof. Dr. Aušrinė Armaitienė
- Prof. Dr. Sergej Olenin

Oviedo:

- Prof. Dr. Julio Arrontes

### **10.30 – 12.00      Discussion with students of the programme**

- Sofie Vanmaele – 2008 – Ghent – Paris
- Mareike Volkenandt – 2008 - Bremen – Oviedo
- Andrea Moore – 2009 – Algarve – Klaipeda
- Bart De Smet – 2009 – Ghent – Klaipeda
- Eva Werbrouck – 2010 – Algarve – Paris
- Hanifah Siregar – 2012 – Ghent
- Fanny Vessaz – 2012 – Ghent
- Linda Buame – 2012 – Ghent
- Mohammed Alsebai – Ghent

## Annex II – Members of the assessment panel

### Chair of the panel

Prof. Dr. Cecilia María Ruiz Esteban - Departamento de Psicología Evolutiva y de la Educación, Universidad de Murcia, Spain

### Member of the panel

Prof. Dr. Johan Verreth, Professor for Aquaculture and Fisheries and Director Graduate School “Wageningen Institute of Animal Sciences”, Wageningen University, The Netherlands

### Member of the panel

PD Dr. Reinhold Hanel, Director of the Institute of Fisheries Ecology, Johann Heinrich von Thünen-Institute, Hamburg (Professional field expert)

### Member of the panel

Karl Agius, Student of the University of Malta (Biology)

### Secretary of the panel

Ronny Heintze, consultant, AQAS (Agency for Quality Assurance through Accreditation of Study Programmes)