

**MarineBiotech workshop:
Mobilisation and Engagement of
Funding Agencies and Stakeholders**

June 2012



Report on the MarineBiotech workshop:

Mobilisation and Engagement of Funding Agencies and Stakeholders

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Summary

The MarineBiotech is a preparatory action for an ERA-NET in marine biotechnology. To achieve its main goal, the project promoted one workshop in order to mobilize and engage funding agencies and stakeholders with interest in marine biotechnology. The workshop was hosted by FCT in April 2012 and took place in Olhão, Portugal.

The objectives of the workshop were to present the work developed by the MarineBiotech consortium and prepare the foundations of a future ERA-NET in marine biotechnology.

1. Introduction

Europe has a 70.000 km coastline along two oceans and 4 seas: the Atlantic and Arctic Oceans, the Baltic, the North Sea, the Mediterranean, and the Black Sea. The EU's maritime regions account for some 40% of its GDP and population. The MarineBiotech recognises that Europe's marine ecosystems and organisms present in the unexplored deep sea and extreme environments are largely unexplored, understudied and underexploited. This access to an extensive and diverse set of marine ecosystems, supporting an enormous marine biodiversity should therefore be better explored for sustainable utilisation.

Marine biotechnology utilises biological resources for the production of goods and services or modifies marine organisms for improved properties. These developments can positively or negatively affect the natural environment, so MarineBiotech is devoted to sustainable use and social acceptance for the use of biotechnology for bio-based production from the marine environment.

While the field of marine biotechnology represents a large potential for European added value, the current level of collaborative research is not sufficient. Interdisciplinary cooperation and networking is needed. Multi and cross disciplinary collaborations between basic research in marine biology, physiology of marine plants and animals, taxonomy, microbiology, biotechnology, nanotechnology, systems biology, bioinformatics, toxicology, *-omics* technologies and chemistry are needed. The result will be new innovations and application in fields such as drug discovery, novel foods and food ingredients, bio-remediation, biomaterials, aqua- and agriculture, diagnostics, production processes and bio-energy. Europe should focus and strengthen its effort in the area of marine biotechnology in order to find competitive niches. Attention should be given to sustainable exploitation of Europe's marine biosphere and the understanding of its biodiversity and natural heritages.

Marine biotechnology has a horizontal scope, with a vertical focus within all thematic areas relevant to its application and represents an enormous economic potential for Europe. No single country or region has the necessary capacity, knowledge or resources to exploit research and innovations from the marine environment. Advanced infrastructures both at sea and in the laboratories will be needed, and **trans-European collaboration will provide synergies and more value for money by a coordinated European funding activity within this area.**

The MarineBiotech is designed to deliver the first concrete steps towards better coordination of relevant national and regional RTDI programmes. Reduced fragmentation and duplication, and paving the way for common programmes and cooperation in the provision and use of research infrastructures through a **future ERA-NET in marine biotechnology** will be the result. In doing so, the MarineBiotech will advance progress in this field towards the vision of a European Research Area (ERA)¹ and promote and position marine biotechnology as a sector which can deliver ‘*smart, sustainable and inclusive growth*’, a core objective of the Europe 2020 Strategy².

The MarineBiotech is a Coordination and Support Action in marine biotechnology funded by the European Commission under the 7th Framework Programme and is a collaborative network of 11 partners from 9 countries that support marine biotechnology research and development in Europe (Table 1).

Table 1. MarineBiotech partners

Partner no.	Name	Acronym	Country
1	Norges Forskningsrad	RCN	Norway
2	Vlaams Instituut Voor de Zee Vzw	VLIZ	Belgium
3	Norgenta Norddeutsche Life Science Agentur GmbH	Norgenta	Germany
4	Danmarks Tekniske Universitet	DTU	Denmark
5	Centre National de la Recherche Scientifique	CNRS	France
6	Institut Francais de Recherche pour L’Exploitation de la Mer	Ifremer	France
7	Fondation Europeenne de la Science	ESF MB	France
8	Consiglio Nazionale delle Ricerche	CNR	Italy
9	Fundação para a Ciência e a Tecnologia	FCT	Portugal
10	Turkiye Bilimsel ve Teknoloji Arastirma Kurumu	TÜBİTAK	Turkey
11	BioBridge Limited	BioBridge	UK

¹ http://ec.europa.eu/research/era/index_en.htm

² http://ec.europa.eu/europe2020/index_en.htm

In order to accomplish its main goal – prepare the foundation for an ERA-NET in marine biotechnology – MarineBiotech set-up the following work plan (Fig. 1):

- Mobilisation of funding agencies and stakeholders: extending the partnership of funding agencies and European stakeholders. To this end the consortium envisages pro-active engagement with relevant and potentially interested funding agencies and stakeholders through development of appropriate fora, the organisation of information sessions, workshops and other project activities – **WP2 led by FCT**.
- Provide better understanding of the Marine Biotechnology landscape in Europe and beyond. The consortium will carry out an analysis of the current landscape (research effort, infrastructures, stakeholders, strategies and programmes, gaps and barriers to cooperation) – **WP3 led by ESF MB**.
- Sketching the contours of future cooperation between funding agencies in the area of marine biotechnology. The consortium foresees workshops involving the extended network of funding agencies and representative governmental organisations to set the stage for the set-up of appropriate cooperation tools to develop joint programmes and pool resources for collaborative research on a European scale – **WP4 led by RCN**.
- Managing information relevant to marine biotechnology research, technology development and innovation, and making this available via a dedicated web-site (including Wiki pages), newsletters, reports and briefing documents – **WP5 led by VLIZ**.

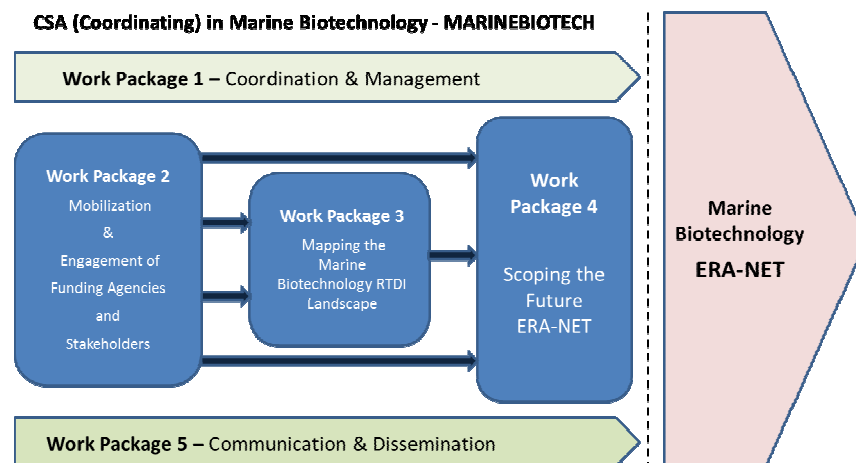


Figure 1. Scheme of the MarineBiotech work packages.

2. Mobilisation and Engagement of Funding Agencies and Stakeholders

2.1. Objectives

The objectives of WP2 – **Mobilisation and Engagement of Funding Agencies and Stakeholders** – are: (i) to identify and integrate funding organisations from EU Member and Associated States towards a Strategic Forum and (ii) to identify and mobilise a wider community of stakeholders who will be part of a Stakeholder Group. Both these groups will provide strategic advice to the project consortium and contribute to a high-quality proposal for a future ERA-NET in marine biotechnology.

2.2. Definition of the Strategic Forum and the Stakeholders Group

The MarineBiotech **Strategic Forum** is composed by Research, Technology Development and Innovation (RTDI) funding agencies from EU Member and Associated States with interest in marine biotechnology. The Strategic Forum aims to (i) strengthen the MarineBiotech by networking core policy makers and funders from the project partners, (ii) provide important information and insight in scoping and preparing for a future ERA-NET in marine biotechnology, and finally, (iii) form the basis of the future ERA-NET consortium.

The MarineBiotech **Stakeholder Group** is composed with stakeholders from research, industry, public support and policy communities relevant to the development of marine biotechnology in Europe. These will contribute to the identification of priority topics and the development of an achievable approach to an ERA-NET. This group will become the advisory group for the future ERA-NET, maintaining impact beyond the end of the CSA.

The potential expectations and benefits of these 2 groups are summarised in Table 2:

Table 2. Potential expectations and benefits of the Strategic Forum and the Stakeholders Group

	Strategic Forum	Stakeholders
Potential expectations	<ul style="list-style-type: none"> ▪ Strong focus on strategic support of marine biotechnology research, development and application. ▪ Act as advisory forum for the MarineBiotech to identify shared strategic areas for action. ▪ Contribute to trans-national exchange of information (help to exchange and disseminate relevant information also to non-MarineBiotech member states). ▪ Identify and mobilise funding agencies at regional and national level. ▪ Help to identify realistic targets and innovative topics for projects launched by a future ERA-NET. ▪ Participation in workshops promoted by the MarineBiotech. ▪ Help to position a future ERA-NET in marine biotechnology within 	<ul style="list-style-type: none"> ▪ Act as advisors for the MarineBiotech. ▪ Contribute to trans-national exchange of information (help to exchange and disseminate relevant information also to non-MarineBiotech member states). ▪ Identify and mobilise stakeholders at regional and national level. ▪ Help to identify realistic targets and innovative topics for projects launched by a future ERA-NET. ▪ Participation in workshops promoted by the MarineBiotech. ▪ Help to position a future ERA-NET in marine

	Strategic Forum	Stakeholders
	the multiple initiatives of the European Research Area (ERA) landscape, providing strategic and scientific advice on marine biotechnology.	biotechnology within the multiple initiatives of the ERA landscape, providing strategic and scientific advice on marine biotechnology.
Benefits	<ul style="list-style-type: none"> ▪ Participate in the formation of a well-organised research coordination structure within marine biotechnology as established by a future ERA-NET. ▪ Contribute to reduced fragmentation of research efforts in marine biotechnology through better coordination and cooperation between key member states. ▪ Be central in forming the basis of the future ERA-NET consortium. 	<ul style="list-style-type: none"> ▪ Improvement of networking activities across a wide range of participants. ▪ Benefit from a well-organised research coordination structure within marine biotechnology established by a future ERA-NET. ▪ Provision of advisory information, which could be relevant for future topics within marine biotechnology.

2.3. MarineBiotech workshop – Mobilisation of Funding Agencies and Stakeholders

The MarineBiotech promoted the first networking event to support mobilisation and engagement of funding agencies and stakeholders with interest in marine biotechnology: **MarineBiotech workshop – Mobilisation of Funding Agencies and Stakeholders**. The workshop took place in April 2012 in Portugal. The parties were briefed on preliminary outputs of the MarineBiotech and had the opportunity to discuss the status of European marine biotechnology, congregate with other EU initiatives, clarify issues of concern, gather input on priorities, help to identify gaps and discuss European competitiveness (Annex I – Workshop agenda).

The MarineBiotech workshop set off with an information day on the MarineBiotech project and other aspects of marine biotechnology in the European research arena. The first session was presented by members of the MarineBiotech consortium and invited speakers representing existing European collaborations, including the JPI-Oceans (Joint Programming Initiative on Healthy and Productive Seas and Oceans), EuroMarine (integrating European marine research networks of excellence) and ERA-IB-2 (ERA-NET focusing on industrial biotechnology). During the second session, top scientists gave us a remarkable overview of marine biotechnology and its potential in different areas. All the presentations are available at www.marinebiotech.eu.

The second day of the MarineBiotech workshop was dedicated to the two important groups which it is the MarineBiotech’s responsibility to create and support – the **Strategic Forum**, composed by funding agencies intended to collaborate in the proposal for an ERA-NET, and the **Stakeholder Group**, whose input is important to ensure timeliness, relevance and context of collaborative research activities in marine biotechnology. Each of these groups had its own workshop in the format of round table

discussions, followed by a plenary session summarising the main points and allowing the MarineBiotech consortium to confirm necessary actions and recommendations for the next stage of the project.

2.3.1. Establishment of the Strategic Forum

The existing funding agencies participating in the MarineBiotech (RCN, FCT and TÜBITAK; Fig. 2) have shaped a core Strategic Forum, which form the basis of the Strategic Forum. One of the main aims of this core Strategic Forum is to catalyse the further development of the Strategic Forum to encompass more funding agencies and facilitate the commitment of other funding agencies towards a future ERA-NET. The workshop was successful in enlarging the group of interested funding agencies including a number of others who were unable to attend but have expressed continuing interest.

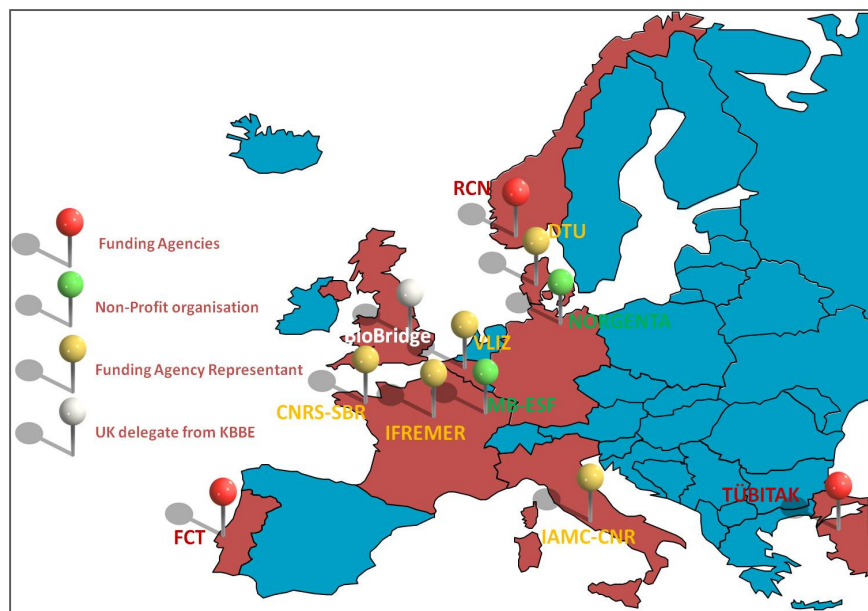


Figure 2. MarineBiotech partners.

It is expected that the Strategic Forum will strengthen the MarineBiotech, providing information and insights into preparing for a future ERA-NET, such as:

- Identifying shared strategic areas for action;
- Mobilising funding agencies;
- Targets and topics for ERA-NET;
- Participating in the planned workshops;

- Positioning the future ERA-NET within various transnational coordination networks of funding agencies in Europe such as SEAS-ERA and JPI-Oceans.

Twelve funding agencies were represented at the workshop (Annex II – Table II.1: List of participants) and were invited to be part of the Strategic Forum. Currently, the Strategic Forum is composed by 9 funding agencies and several have expressed interest in the activities carried out by MarineBiotech (Table 3).

Table 3. Establishment of the Strategic Forum

Funding agencies committed to the Strategic Forum	Funding agencies interest in joining the Strategic Forum	Funding agencies/countries to follow up established contacts
RCN, Norway	BelSPO, Belgium	Rannís, Iceland
FCT, Portugal	FNRS, Belgium (Walloon region)	Finland
TÜBITAK, Turkey	IWT, Belgium (Flanders)	Sweden
CNR, Italy	FWO, Belgium (Flanders)	Greece
ANR, France	BBSRC, UK	Cyprus
DASTI, Denmark	TSB, UK	Malta
MINECO, Spain	Germany	Scotland
ADECAL, New Caledonia	MI, Ireland	Italy (regions esp. Sicilly)
UEFISCDI, Romania	NWO, Netherlands	
	Switzerland	
	NCN, Poland	
	NCBiR, Poland	

At the round table discussion dedicated to the Strategic Forum, all the represented funding agencies were invited to present their strategic priorities on marine biotechnology and the programs already supported or planned to support in this area. The goal for this discussion was to get a comprehensive overview on the different national strategies, tentative budgets and complementarities, which will be a good basis for an ERA-NET proposal. A summary of the round table discussion was compiled by RCN (WP4 leader) and is available at www.marinebiotech.eu.

2.3.2. Establishment of the Stakeholder Group

Twenty six stakeholders from ten countries participated at the workshop (Annex II – Table II: List of participants) and were invited to be part of the Stakeholder Group.

The round table discussion dedicated to the Stakeholder Group promoted a discussion of the needs of the scientific community in marine biotechnology and aimed at getting expert input on three main topics, inspired by the Marine Board’s position paper 15³:

a. Strengths and weaknesses in marine biotechnology

The stakeholders participating at the discussion concluded that there are no research gaps in marine biotechnology, not previously identified at the Marine Board’s position paper 15. The scientific community feels that industry and markets drive the research in this field, as this sector progresses faster than academia. Therefore, industry could take an early interest in the development phase. In addition, it is important that industry knows who to approach to seek for new collaborations and expertises in academia.

The European Technology Platforms (ETPs) had a special mention, as these can play an important role in facilitating and accelerating access to screening and –omic platforms.

Intellectual property (IP) was identified as an issue where the researchers would beneficiate from help and assistance from facilitators.

b. How can technology transfer be improved

In order to improve technology transfer, the whole value chain needs to be considered and complementary expertise must be brought together. The involvement of industry at a proof-of-concept phase is seen as beneficial, reinforcing the wish from academia for strong collaborations with industry.

c. Resource problems

There are existing infrastructures already in place (i.e.: EMBRC), however, these are not biotech specific. The need for specialised training was stressed during this discussion. For example, combined training between academia and industry (i.e.: work place training) would be very beneficial, as it would better fulfill the needs from industry (i.e.: there is a need for training on photobioreactors, as there is a lack of trained personnel in the field).

³ http://www.marine.ie/NR/rdonlyres/C076682C-2B32-437C-A781-B2EACBAA6B62/0/ESFMBmarine_biotechnology_paper15LR.pdf

Also, the mapping of the available PhD courses, as well as summer schools and training courses, would be helpful.

3. Recommendations from the Strategic Forum and the Stakeholders Group

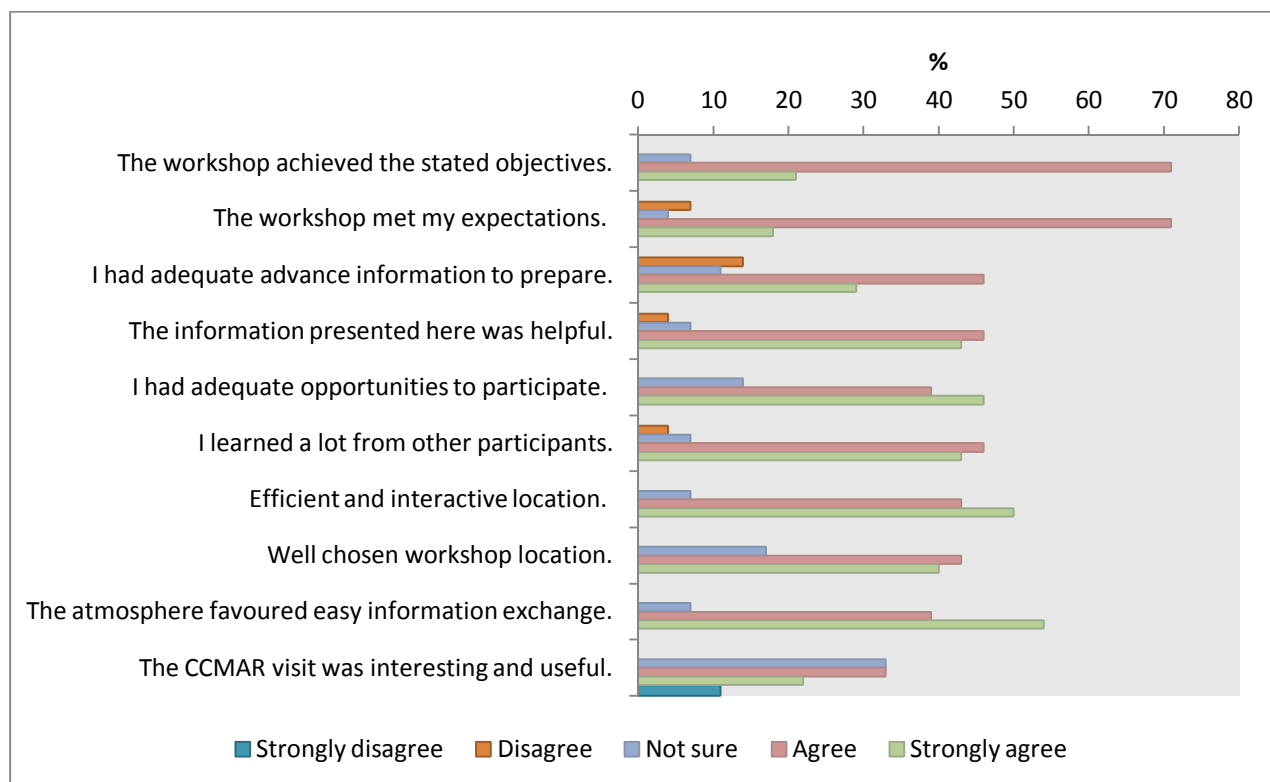
The parallel round table discussions of the Strategic Forum and the Stakeholders Group, respectively, originated a set of recommendations from both these groups: general advice and specific advice for the preparation of an ERA-NET in marine biotechnology. The recommendations were presented at the end of the workshop:

- Position the future ERA-NET in marine biotechnology in the European arena
- Define the scope of the future ERA-NET in marine biotechnology
- Establish an outline for the preparation of the future ERA-NET in marine biotechnology (deadline for submission of a proposal: February 2013)
- Support the continuation of the Stakeholder Group and its active involvement in the preparation of the future ERA-NET in marine biotechnology

3.1. Survey to gather feedback on the MarineBiotech workshop

Following the workshop, all participants were invited to answer a short survey (consisting of 6 questions) to gather feedback on the MarineBiotech workshop. The survey had a response rate of 46%.

The first question of the survey aimed to assess the opinion of the participants concerning the organisation of the workshop. The results are presented at the graph below:



In general, respondents thought the workshop met their expectations and that the information presented was helpful.

The workshop received positive feedback (Annex III – Table III) from the respondents. The participants gave special emphasis to the networking, the wide representation of funding agencies and stakeholders from various sectors (i.e.: academia and industry) and the fact that the workshop allowed room for discussion.

All the respondents intend to attend the 2nd workshop in October 2012. The expectations for the 2nd MarineBiotech workshop (Annex IV – Table IV) are:

- Priorities in the field of marine biotechnology and how these priorities are going to be addressed by the future ERA-NET;
- How do the different initiatives at EU level interact between them to increase their coordination to avoid overlapping of activities and priorities ;
- Look at the synergies that could be generated from the coordination/interaction of the different initiatives and its added value;
- Creation of the new ERA-NET consortia;
- Present a clear outline of the coming ERA-NET in marine biotechnology;
- Assist with the development of a platform to allow stakeholders to express their view;

- Foster good interactions between participants and give concrete advices towards the achievement of the proposal.

4. Future work

A 2nd MarineBiotech workshop will be held 8-9th October in Hamburg. The MarineBiotech project will finish with a public conference in the first quarter of 2013 at which the progress towards an ERA-NET will be announced. Details will be available in due course, via the web, the MarineBiotech e-Newsletter and other marine bio-related electronic mailings.

Annex I

Workshop agenda

MarineBiotech

**Workshop 1: Mobilisation and Engagement of Funding
Agencies and Stakeholders**

Venue: Hotel Real Marina, Olhão, Portugal

26th – 27th April 2012

Agenda

Thursday, April 26th

12:30 Registration

13:00 Welcome Lunch

14:00 Welcome and Opening
Cristiana Leandro (FCT, Portugal)

Workshop 1: Mobilisation and Engagement of Funding Agencies and Stakeholders
Chairperson: Catarina Resende (FCT, Portugal)

Session 1: Background and landscape

14:10 Introduction and presentation of MarineBiotech
Coordinator Steinar Bergseth (RCN, Norway)

14:30 Mapping the Marine Biotechnology RTDI Landscape
WP3 leader Jan-Bart Calewaert (ESF-MB, France), Meredith Lloyd-Evans (BioBridge, UK)

**15:00 Presentation of the results of the short survey on programmes in marine biotechnology
(participant funding agencies)**
WP2 leader Cristiana Leandro (FCT, Portugal)

15:10 European activities and organisations with interests in marine biotechnology:

JPI-Oceans Teodoro Ramírez (JPI Oceans Secretariat)

EuroMarine Catherine Boyen (Coordinating team)

ERA-IB-2 Marion Karrasch (Work package leader)

15:45 Coffee break

Session 2: The knowledge base

Chair: Adrianna Ianora (Stazione Zoologica Anton Dohrn, Italy)

16:00 The deep-sea frontier: Which opportunities for biotechnology?

Prof. Ricardo Serrão Santos (U. Azores, Portugal) + Q&A

16:30 Bio-mining the microbial treasures of the ocean: Early drug discovery and models for Entering Pharmaceutical Pipelines

Dr. Antje Labes (GEOMAR, Germany)

Marine biotechnology for aquaculture and fish and ocean health

Prof. Anders Goksøyr (University of Bergen, Norway)

Industrial applications in marine biotechnology

Dr. Neil Parry (Unilever, UK)

17:30 Closure of day 1

20:00 Working dinner

Friday, April 27th

9:00 Welcome

Session 3: Defining interests and support

Chair: Coordinator Steinar Bergseth (RCN, Norway)

9:10 WP2: Definition of the Strategic Forum (consisting of funding agencies and strategic support organisations with interest in marine biotechnology)

Cristiana Leandro (FCT, Portugal)

9:20 WP2: Definition and role of the Stakeholders Group (consisting of stakeholders with interest in marine biotechnology)

Identification of

Imke Schneemann (Norgenta, Germany)

- 9:30 Parallel round table**
- (1) Stakeholders group: discussion of the needs of scientific community in marine biotechnology**
Chairperson: Catherine Boyen (CNRS, France)
 - (2) Strategic forum: discussion of national priorities, tentative budgets and complementarities**
Chairperson: Katrine Shadidi (RCN, Norway)
- 11:00 Recommendations from the Strategic Forum and the Stakeholders Group: general advice and specific advice for the preparation of an ERA-NET in marine biotechnology**
Chairperson: Coordinator Steinar Bergseth (RCN, Norway)
- 11:30 Wrap-up of the 1st workshop and definition and approval of action plan**
Next workshop
Chairperson: Coordinator (Steinar Bergseth) and programme manager (Meredith Lloyd-Evans)
- 12:00 Closure of the meeting**
- 12:15 Lunch**
- 13:00 Visit to the Centre of Marine Sciences (CCMAR) in the University of Algarve**
Host: Prof. Adelino Canário (CCMAR, Portugal)

The Centre of Marine Sciences (CCMAR) is a non-profit organisation on the Gambelas campus of the University of Algarve and dedicated to R&D in the Marine Sciences.

CCMAR fields of expertise cover molecular biology, genetics, endocrinology, biophysics, organic chemistry and ecology of marine organisms. R&D and training activities have been applied to the development of aquaculture, biotechnology and environmental technologies for the study and management of marine resources and ecosystems.

CCMAR is located close to the Faro airport (approx. 8 km, 15 min by bus).

Annex II

Table II – List of participants

Country	Organisation	Participant	
Belgium	VLIZ	Karen Rappé	Describing MBt and funding situation in Flanders
	ESF-MB	Jan-Bart Calewaert	
	EuropaBio	Nathalie Moll	
Denmark	Novozymes	Carsten Sjøholm	
	DTU	Torger Børresen	Representing the Ministry of Science, Innovation and Higher Education
		Henrik Jarlbæk	
France	MNHN	Vanessa Demanoff	
	L'Oréal	Patrick Choisy	
	Ifremer	Jacqueline Penez	Representing Maurice Héral from ANR
		Patrick Durand	
	CNRS	Catherine Boyen	
Pierre Fabre	Arnaud Bocquet		
Germany	Norgenta	Imke Schneemann	
	JUELICH / ERA-IB-2	Marion Karrasch	
	GEOMAR	Antje Labes	
Ireland	Marine Institute	Aengus Parsons	
		Ilaria Nardello	
Italy	Stazione Zoologica Anton Dohrn	Adrianna Ianora	
	CNR	Renata Denaro	
		Salvatore Mazzola	Representing the Italian Ministry
BioNat	Carmelo Pollichino		
New Caledonia	ADECAL	Adrien Rivaton	
Norway	The Norwegian Bioindustry Association	Thor Amlie	
	Uni Environment Department	Hans Kleivdal	
	University of Bergen	Anders Goksøy	
	Biotech North	Ernst Klosterman	
	RCN	Steinar Bergseth	
		Katrine Rese Shadidi	
Tina Rebecca Hov-Gylthe			
Poland	NCN	Magdalena Kowalczyk	

Table II – List of participants (cont.)

Country	Organisation	Participant	
Portugal	FCT	Cristiana Leandro	
		Joana Pinheiro	
		Carla Ng	
		Catarina Resende	
	U. Azores	Ricardo Serrão Santos	
	Bioalvo	Helena Vieira	
		Ana Martins	
	Sparos Lda	Jorge Dias	
	U. Minho, 3B's	Tiago H. Silva	
	U. Minho, 3B's	Joana Moreira-Silva	
EurOcean	Maica Garriga		
CCMAR	Adelino Canário		
U. Azores	Raul Bettencourt		
Spain	CSIC	Ricardo I. Perez Martin	
	MINECO	José-María Sánchez-Puelles	
Sweden	Linnaeus University	Peter Brodelius	
UK	BioBridge Limited	Meredith Lloyd-Evans	
		Sue Addison	
	BioscienceKTN	Michelle Carter	Representing TSB
	BBSRC	Tim Willis	
	Unilever	Neil Parry	
	JPI Oceans	Teodoro Ramírez	

Note: Participant in grey represent a funding agency.

Annex III

Table III – Responses to the question of the survey concerning positive aspects of the workshop

	Positive aspects of the workshop
1	There was a wide representation of stakeholders and Research Funding Agencies, which made the Workshop was a very interesting platform for discussion and exchange of information and ideas. Also the presentations given by the invited speakers and the partners of MarineBiotech were quite interesting and fed the debate. The room where the meeting was held had a good size and was very comfortable and well equipped.
2	The stakeholders had a real opportunity to express their vision on the questions proposed. However it could have been useful to have received those questions in advance.
3	Good overview over ongoing activities in the field.
4	Participation of stakeholders.
5	The workshop brought together most of the relevant people to the Marine Biotech initiative.
6	A good start to the process.
7	The networking. Met many nice people.
8	All players well represented.
9	The best thing was the round table discussions the second day. The first day came to contain too many presentations with partly overlapping contents.
10	I met people (stakeholders) from different fields and different countries and have a better view of their expectations.
11	- good program with excellent speakers - possibility of meeting new people working in this field - interactions with people coming from industry and funding agencies, and not only academia
12	- Good and comfortable place - Friendly and helpful staff - Good food - Facilities well suited for the WS - Easy to interact with the other participants
13	The dinner to speak to each other.
14	Organization. Time allowance for the various topics of discussion.
15	The opportunity to start and reinforce contacts to support the established network in this area.
16	Networking
17	Very good opportunities for networking, good chosen mix of participants.
18	Networking, getting ideas of further development of the collaboration started.
19	This workshop congregated a nice and friendly team of potential partners which anticipates a successful

Positive aspects of the workshop	
	application in February 2013 when this consortium will submit its ERA-NET proposal to the KBBE Marine Biotechnology call. One could already see how well this consortium was organized and positioned itself together with prominent groups and stakeholders from Norway and Denmark, with a long standing know-how in Marine Biotech which a lot to share with other groups not so familiar with Marine Biotech but with great marine resources and willing to collaborate and share their resources and their expertise in other areas of Marine Biology of interest to the consortium. This meeting was really the first acquaintance meeting where some decisions were taken and decisive actions were made which paved the way for the next meeting and for the preparation of the proposal.
20	I learned more about Marine Biotech and activities in other countries.
21	Organization, few key actors from funding agencies.
22	Room for the meetings and technology Interaction opportunity Interesting ideas exchange and the rapid sum up
23	The scientific presentations were very interesting and gave a useful overview of activities in Europe. I made some useful contacts. The opportunity to learn about how other funding agencies across Europe operate and where their strategic priorities are placed, was very interesting and insightful. The food was fantastic.

Table IV – List of expectations of the respondents concerning the 2nd MarineBiotech workshop

Expectations concerning the 2nd MarineBiotech workshop	
1	I would expect an interesting debate on the priorities in the field of MarineBiotech and how these priorities are going to be addressed by the new ERANET and also which might not be addressed. I also would expect that the second forum addresses how the different initiatives at EU level should interact between them to increase their coordination to avoid overlapping of activities and priorities and also to look at the synergies that could be generated from the coordination/interaction of the different initiatives and the added value of it.
2	Get closer to the goal of obtaining the agencies' commitment; How do we do that? I expect to receive some "food for thought" before the workshop, so we can come to the discussion table with some ideas; Networking;
3	Preparation of the answer to the Eranet's call. Participation of a larger number of funding agencies.
4	The next workshop shall see the creation of the new ERA-Net Consortia.
5	Further networking and building of links between industry and funding agencies; greater number of industry participants; evolution of approach and proposal for ERA-NET in MB
6	Must be more specific in what shall be achieved.
7	I am aware of the fact that the CSA is running its own programme, but considering the major aim of preparing

Expectations concerning the 2nd MarineBiotech workshop	
	an ERA NET, I expect the second workshop to present a clear outline of the coming ERA NET.
8	Help to build a platform (a forum) for allowing stakeholders to express their view.
9	More discussion on the Marine Biotech ERA-Net which is being prepared and how it will function.
10	- Concrete discussions concerning partnerships and structure (organisational and content) of the ERA-net - Active work sessions - Fruitful funding agency - stakeholder interactions
11	To get into depth of the programs as soon as possible during the workshop.
12	Identify partners with pilot-scale facilities that would enable us the batch production of tailored products.
13	Return some contacts, learn about collaboration activities, learn about recent activities of the participants and have feedback from organization on the work to establish a MarineBiotech ERA-NET.
14	Perhaps more information on the future shape of the eranet.
15	As an outcome: strategic advise for ongoing political development, new ideas for projects.
16	Seeing more of the scope for the ERA-NET.
17	For the next meeting I expect to see and experience more interactions with the participants and also to participate in more decision making actions toward the achievement of the proposal. It is also important that we discuss and agree upon strategic activities lines which have been laid down in the latest Marine Board-ESF Position Paper. Some of the research lines have already been touched upon during our meeting in Faro but for the next meeting we need to assess properly and assertively, all the resources facilities available within the consortium, including research facilities and technological facilities including technologies that are being deployed at sea during sampling operations. Also it should be decided which groups should be doing what and when and how when the proposal will be written. This is important to actively set up a concerted action to hold this consortium together. Coordination is now a must for the next meeting and subsequent ones. Each partner and stakeholder should at this time, know exactly what to contribute with whether at the scientific/experimental level or technological level, lab facilities, research vessels. A proper inventory/assessment of human resources, facilities, databanks, biological material where to store? Share? Biobanks where? and when? should be achieved by the time of the second meeting.
18	To confirm arrangements for the CSA proposal for a possible ERA-Net.
19	Decision to avoid overlap among marine biotech european activities, have the chance to meet with key decision partners to move on properly in the meeting.
20	-The definition of the role of stakeholders which we involve within MarineBiotech project and their expectations about the ERANet. -As it was suggested, specify tool boxes where stakeholders could identify themselves - More space for scientific presentations
21	If possible, a clearer picture of the proposal and its scope. The UK is already supporting an ERA-NET in Industrial Biotechnology within which, Marine Biotechnology is in scope but accept that drug discovery/health care are excluded. In order for UK funding agencies to make an informed decision regarding financial support for this ERA-NET, the benefits of a separate ERA-NET will need to be clearly defined.

Table V – List of general comments

	General comments
1	During the first workshop it was told that the Stakeholder Group is not intended to be a permanent Group, but rather is an ad-hoc Group to provide inputs to the CSA MarineBiotech and therefore it will be end up when the CSA MarineBiotech comes to an end. I think that the new ERANET should also interact with stakeholders not only to try to define and establish priorities, needs and gaps for the SRA but also to provide inputs on how to coordinate, interact and create synergies with other ongoing EU initiatives closely related to MarineBiotech (e.g. SEASERA, JPI Oceans, COFASP, etc).
2	It may occur that the funding agencies will want to propose different themes and format for the ERANET calls than what emerging from the consultation with the stakeholders. How will this be addressed in the ERANET, i.e. are the stakeholders wasting their time coming to the table?
3	The round table discussions for both SF and SG should probably be devoted more time if we decide to have these meetings in parallel.
4	Longer time, especially for round-tables, would have improved it, though. I have not ticked below all those whom I already work with on CSA MB.
5	The Strategic Forum session did not provide sufficient time to discuss the main issue - i.e interest and potential participation in the ERA-NET.
6	The setting of the conference facilities was impressive with a big room making it possible to have people sitting alongside the outer side of the tables, but that created a lot of empty space in the middle of the room, resulting in quite some 'distance' between the participants, which possibly led to less discussions. Our experience with workshops like this is to create a more intimate atmosphere, where people are seated at group tables filling out the space of the room.
7	Some kind of informal "get together" could be useful (e. g.: reception, cocktails before dinner, ...).
8	I got the impression that a lot of priorities for resaerch have already been reviewed and listed in recent documents. For once, I think that we should avoid doing it again in the framework of the new ERANET and focus mainly on implimennting it.
9	Workshop-phase of the meeting could have been more interactive in better focussing the questions to be discussed.
10	The travel to Faro was long and time-consuming.
11	Next meeting should be held at a convenient venue, not too far from the city center and plenty opportunities for participants to mingle with each other. The Faro meeting was very successful; the next meeting should follow the same guidelines.
12	I woud suggest the meeting with key people of the funding agencies to adopt decisions and actions. Delegates can not adopt decisions. It would help to have a complete road.-map of marine biotech activities in Europe.