



**Technology Transfer
2nd panel meeting**

**17th June 2011
Mid-Norway European Office, Avenue Palmerston 3, 1000 Brussels
Brussels**

Chaired by: Torgeir Edvardsen

report

- Welcome by the Chair and the project Coordinator;

The Chair and the project Coordinator welcomed the participants and expressed gratitude to the Mid-Norway office for providing the office space needed for the meeting.

- MARCOM+ initiative – background, concepts, progress (conclusions from hitherto panel meetings, timeline of consortium actions);

The MARCOM Coordinator gave a presentation ‘Towards a Common Vision of the Marine and Maritime Science and Technology Community’. The timeline for the future Forum initiative was presented by the MARCOM project manager.

Discussion:

Frank Roland: there is a need from the industry to cooperate with marine science organizations; a single user-friendly place to look for partners, where both marine and maritime sides are equally represented, would be appreciated. The European Commission's Cordis partner search tool is too generic.

Graham Clarke: This initiative should base on the experiences of the Maritime Industries Forum. For 20 years the Forum has been bringing together 28 organizations. The Forum has been focusing on areas of common interest and identifying areas where economic benefit is recognized. Also working groups with limited and specific task orientation were created to deal with different issues. The MIF future is now under a question mark due to the fact that the European Commission has ceased funding its secretariat / coordinating structure.

Frank Roland: In practical turns we see that the two communities (marine and maritime) are very different one from another. The 'Oceans of Tomorrow' call was and is in this edition marine/maritime-oriented. The industries are not aware of the findings of Framework Programme projects – no information on finalized initiatives is available on the Cordis portal, project coordinators should be asked to publicly disseminate results of the projects.

Graham Clarke: there are successful long term cooperation models to look at. The fundamental thing is to find areas of common interest. Once you have done that the organizations including industry can be willing to carry on and even fund such coordinating initiatives. By meeting face to face one can achieve much more than via a video conference.

Frank Roland: the Maritime Industries Forum has been a useful exercise. Smaller groups have proven to carry on successfully, larger groups, with many stakeholders of different background, have had lower chances of a long term success because of a diffuse of aims and interests. The number and variety of coordination / support action projects funded by different directorates of the Commission causes slight confusion, especially because these initiatives do not cooperate and because a single knowledge output base is not available. This points at relatively low efficiency of the funding allocations for this matrix of projects. Another thing is the system of national contact points (partner and competence search tools). These have to be coordinated on a European scale.

Adi Kellermann mentioned the ICES model resembling the need expressed by Frank Roland. If an organization lacks national expertise it turns into the ICES secretariat. In consequence of such request, an international expert group is being created to come up with an answer / recommendation to the requesting party.

- Review and adoption of Report 1st Panel Meeting

Leif Magne Sunde explained his comments to the priority topic list worked out during the 1st Technology Transfer Panel meeting. The main goal for MARCOM+ should be to improve production values (marine biomass and marine energy for instance) and look for new space for innovations. Establishment of an arena where MARCOM+ would challenge individual stakeholders (e.g. biologists and engineers) to cooperate is needed.

John Sweetman: research is often supported financially by government institutions and the industry has to finance itself entirely. Cooperation on both terms requires recognition of clear benefits.

Karl Strømsem: the experience from projects bringing engineering capacity into biological sciences shows that a solution providing structure is needed indeed. MARCOM+ should be identifying problems and looking for solutions by gathering information from different sectors.

The minutes from the 1st Technology transfer Panel meetings were adopted.

Gunvor Øie gave the presentation ‘Development and technology transfer of new technology for marine juvenile production’ – a next (more automated) generation marine juvenile hatcheries (the presentation constitutes an attachment to this report). A discussion took place on different feeds and their leverage on the extent of produced mass losses.

Frank Roland pointed out that this is one of the cases of technology transfer where good products come out of laboratories and there is no market for them. Small companies are the ones which become clients of the innovative products. Bigger companies require a different extent of production which, with new products, takes more time.

John Sweetman: There needs to be patent recognition when industry brings ideas to universities / institutes and then funds the research itself, regardless of university regulations.

Karl Strømsem: cooperation with SMEs and technology transfer to small business should be one of the topics for the MARCOM Forum to tackle.

Adrianna Ianora: the larger industries are the ones who will be able to carry on with projects for many consecutive years and it takes many years sometimes for developing products to arrive in the market. SMEs usually fail in this as they are not able to assure the required continuity.

Karl Strømsem: it is extremely difficult to spark a new idea in a big company – it's the small companies that are the most effective in sparking ideas and developing them to a stage when they are taken over by big industry.

Frank Roland: there are examples where big companies financially support small business to continue working on a special project when the small business is struggling with cash flow (e.g. as an effect of short term character of EU funding).

- Discussion and recommendations on the project's main goal: construction of the European Marine and Maritime Science and Technology Forum (MARCOM Forum), terms of reference, future roles and functionality. Assessment of the options towards the establishment of the long lasting, self sustainable marine/maritime forum, engagement of science organizations, policymakers, industrialists and representatives of civil society; thematic structure and availability of individual experts.

Adi Kellermann presented the initial model of the future MARCOM Forum (agreed by MARCOM+ the Steering Committee meeting earlier the week) and opened it for discussion:

Frank Roland: we do have blueprints with organizations like ECMAR (a membership based organization). The association director is paid from the member fees, the working groups can be initiated by any member. Financing of a working group comes often from project money. At a certain stage a secretariat is needed, without it contribution from members would be

needed. Common funding should be used for specific tasks like organization of conferences, working groups etc.

Torgeir Edvardsen: strong leadership is needed and pro-active participation in many meetings will be essential. The marine and maritime science sector needs to raise its profile and speak in one voice because we are competing with other sectors.

Frank Roland: the customer could be our own community. Providing a single voice of marine and maritime science communities will be extremely difficult. It is advised to focus on specific projects to organize a group which will seek financing for specific activities.

Adriana Ianora: Working groups have identified areas of common interest. Working groups can be created to try to better define the common areas of interests. A structure will be needed to lobby for the community. The chairman rotation idea is also positive as representation will be given to all the parties engaged.

John Sweetman: This Forum has the opportunity of bringing all the major marine/maritime topics together. The Steering Committee needs to deliver inspirational ideas and to communicate to the communities in order to develop them. The wider communities, being outside of the Steering Committee, need to feel they are represented in the Forum. The secretariat should be responsible for a information distribution system, so that the communities are updated on the Forum's actions. The workload to assure this will be substantial.

Graham Clarke: What kind of technology / knowledge transfer should be tackled on the Forum meetings?. A lot of that transfer has to take place between the marine and maritime communities.

Victor Oiestad: the forum should be instrumental in shortening time between research processes and a commercialised market product. Europe is in a hurry in terms of competing with other countries, especially from the Far East.

Adi Kellermann: the forum could sit together and advise the Commission also on more efficient funding schemes.

Leif Magne Sunde: the Forum should not look behind but should be forward looking. One key issue to tackle is removing of limitations which small business has to face when acting in the RTD sector.

Karl Strømsem: economical interests will be the key driver for science/industry cooperation and have to be taken into consideration.

Victor Oiestad: we need to develop ideas that have sparkled somewhere else. This forum should be a promoter of such ideas e.g.: the use of the totally unexploited populations of squids in the North Atlantic.

John Sweetman: what we need is ways to prove that research and emerging technologies are financially attractive to companies. If such demonstrations are done in a effective way the industry will be attracted as clients.

Graham Clarke: Some problems cannot be solved without a political change. This organization will need to lobby on policy matters. A right political message will need to be conveyed. The MARCOM consortium has to come out with positive messages and strive for success.

The Chair requested discussion on the following areas of common interests:

1. Aquatic living resources (sustainability, mariculture, capture fisheries, transport and processing, future vessels etc.)
2. Ocean energy (synergies between ocean energy, fisheries and aquaculture, cost-effectiveness)
3. Ocean resources for blue biotechnology (pharmaceuticals, material research)
4. Impact of climate change on maritime activities
5. Human activities and impact on ecosystems (resilience, vulnerability, marine litter)
6. Maritime spatial planning
7. Human health and wellness (from the oceans)
8. Non living sea resources (incl. extraction technologies)
9. Maritime transports and bioinvasions

John Sweetman: In order to get big changes to occur the funding priorities should be changed on European level. An integrated system of emerging technologies should be supported.

Adriana Ianora: the list could be shortened to 4-5 key points which include all the listed issues e.g. human wellbeing could encompass health and wellness and ocean resources for blue biotechnology.

Adi Kellermann invited everyone to contribute to detailing these areas of common interest.

Graham Clarke: if the list is shortened it could automatically create e.g. 4-6 working groups as places where experts can find themselves.

Victor Oiestad: Europe does not have dynamic solutions. If such a Forum comes up with a brilliant idea it would take 4-5 years for the Commission to finalize a call for that. By that time the industries in the Far East would have used it for a couple of years.

Adriana Ianora: the small projects (2-3-partner projects) from Framework Programme 4&5 were of great value. The bigger multi-partner initiatives proved to be less effective for the innovation chain.

Leif Magne Sunde: innovation is rarely profitable in the beginning stages of its development. So in the initial stages of product/technology developments profitability should not be the central orientation. The identified grand challenges are possibilities for people working in this area. MARCOM+ should try to grab some of these challenges and shape its work accordingly.

The Chair and the Coordinator thanked the participants for attendance and input.

Meeting attendants:

- Graham Clarke (ECMAR)
- Torgeir Edvardsen (EATIP)
- Adrianna Ianora (RINA, MARBEF+, EUROMARINE)
- Adi Kellermann (MARCOM+ project Coordinator)
- Dennis Lisbjerg (EFARO)
- Gunvor Øie (SINTEF)
- Victor Oiestad (AKVAPLAN NIVA)
- Frank Roland (CMT Germany)
- Karl Stromsem (EOEA)
- Leif Magne Sunde (SINTEF)
- John Sweetman (Aquaculture SME, Greece)
- Wojciech Wawrzynski (ICES)