

5th Annual Meeting Brussels, 10th September 2013



Report of the Meeting

The EATiP held its 5th Annual Meeting in Brussels on the 10th-11th September 2013, focusing on the current status and future of EATiP, following its official recognition as a European Technology Platform (ETP).

The role of EATiP

The **EATiP Chairman, Gustavo Larrazábal**, reminded why there should be an ETP dedicated to aquaculture. Promoted initially by a combination of industrial and research interests, decision was taken within important stakeholder meetings that consensual views on the RTD needs of the sector were needed. This position had to be accompanied by a clear vision for the future of European aquaculture, recognising both challenges and opportunities. This has now been achieved, through the largest and most important consultation effort on European aquaculture, facilitated by the FP7 project 'Aquainnova'. Achieving sectoral growth – through increased competitiveness from RTD and innovation – is the main objective. Following essential contributions by the participants of the Thematic Areas and Working Groups, the results of 5 consultation workshops provided the basis of the document 'Our Vision: the Future of European Aquaculture' – EATiP's Vision and Strategic Research and Innovation Agenda. The Action Plan for implementing these has been developed but remains a 'live' issue for further work and diffusion. Continued work on prioritisation remains essential for the guidance of RTD actions and funding so as to improve the position of European aquaculture producers.

The Chairman underlined his wish for EATiP to maintain a clear focus on European aquaculture and promoting its growth and development by finding the right ways to achieve:

- Prioritised research actions
- Incorporation of innovation
- Assurance of communication and dissemination
- Increasing competitiveness

EATiP should retain this focus, with conviction and clarity, and the Chairman requested that the Commission support this position in the same manner. EATiP needs to turn its Vision, its SRIA and its Action Plan into reality and that it needs support from the Commission to convince Member States to invest in the lines and targets of our SRIA, to assist monitoring of the Action Plan and to continue its support to research, support and networking actions in aquaculture. For the successful mobilisation desired, achievements are needed!

It was put forward that this meeting should be seen as a start to aligning strategies for the success of EATiP's Vision, in line with Horizon 2020 and the new ETP Strategy as well as aquaculture's role in the Common Fisheries Policy. These should be essential components of the successful and sustainable development of European aquaculture.

Mr Sivasegaram Manimaaran of the Innovation Policy unit in DG Research & Innovation gave a comprehensive review of the role of ETPs in the context of the Innovation Union and Horizon 2020 (presentation link).

There are 3 main functions expected of ETPs: Strategic, Mobilisation & Synergies, Dissemination & Cooperation. *These aspects were presented – through different projects and actions – to the participants in 3 separate sessions of the meeting.*

He noted that in the new strategy for ETPs, the following points are the key features anticipated:

- ETPs should have a holistic view on Research and Innovation
- Be inclusive & representative
- Work in partnership with each other (synergies) and with Member States
- Encourage industry participation in Horizon 2020 and help to widen participation
- Identify opportunities for international cooperation
- Provide networking opportunities
- Facilitate the formation of new partnerships

Guidance and assessment on progress will be provided in the future by the Commission.

Of particular note should be the support given to demand-side activities and the SME instrument – each targeting improved economic activities. Following the official recognition of 38 ETPs, a cross-ETP workshop is to be organised around the end of 2013.

Mr Courtney Hough, General Secretary of EATiP, provided a short overview of the ‘Strategic Guidelines for the Sustainable Development of European aquaculture’, published by the Commission in April 2013. In noting that this foresees growth and a contribution by aquaculture to the EU seafood supply gap, there are 4 key objectives:

1. Simplify administrative procedures
2. Coordinated spatial planning
3. Enhance competitiveness
4. Promote a level playing field for aquaculture operators

There is clear encouragement to achieve the EATiP Strategic Research Agenda for improving competitiveness. Under new proposals for governance, multi-annual plans and operational programmes are foreseen – accompanied by the exchange of best practices. Since there is no ‘Common Aquaculture Policy’, this will depend on the efforts of the Member States, the European Commission and a new stakeholder-driven Aquaculture Advisory Council.

In looking ahead, it was concluded that there are big changes coming to the European ‘environment’

1. A new Common Fisheries Policy, with clear focus on development and innovation, improved governance – including the new Aquaculture Advisory Council.
2. A new RTD Framework programme - Horizon 2020 – with revised roles for European Technology Platforms – where EATiP has an important role to play but must be structured to respond and participate in relevant actions in the future.

The Strategic Function of EATiP

Examples of the ‘Strategic Function’ were provided by the results of 2 current FP7 projects involving EATiP.

- **Professor Patrick Sorgeloos** reviewed the progress of AQASEM 09 – a project looking to examine areas of cooperation in aquaculture between Asia and Europe, where a recent visit to China was reported. Another AQASEM-EATiP visit to Vietnam will be organised in late 2013.
- **Dr Jean-Paul Blancheton** provided detailed results of AQUAMED, which has looked to create a Mediterranean platform, focusing on the research needs and structure within the Mediterranean Region. Since this project has ended, efforts are being made to assure the perennity of the work achieved, notably with the Committee on Aquaculture of the General Fisheries Council of the Mediterranean.
 - Aquamed has developed different databases relative to its regional approach (mapping of capacities and interests) and it was noted that knowledge management is seen as a top priority by its participants.

Overall, EATiP has already achieved much in respect of the Strategic Function, having identified many areas of potential development within its ‘Vision: the Future of European Aquaculture’.

During discussion on the potential for international cooperation and activities, it was noted that EATiP has only limited financial resources to be able to assist other international platforms and that its current focus has been more towards Europe – notably on its efforts to finalise ‘Aquainnova’.

Mobilisation and Synergies

In addressing ‘Mobilisation and Synergies’, representatives of other Bioeconomy ETPs made short presentations on where these could provide additional synergies with the work of EATiP.

Ms Marjolein Neuteboom presented the ETP on Farm Animal Breeding and noted that this sector is

- knowledge intensive,
- highly competitive,
- and has high rates of innovation (often originating from the EU) (e.g. new computing methods, genetics, genomics, measuring techniques).

This sector is changing rapidly and has to be highly adaptive, while remarking that – in the last 50 years, breeding activities have been responsible for significant increases in productivity in land animals. Economic gains have thus been significant – estimated at €80 million/year for fish farming in Europe.

Many of the challenges identified are identical to those of the EATiP Vision and SRIA, with focus on reducing environmental impact, improving fish welfare and robustness and other generic topics (e.g. genomics, knowledge transfer...).

In summing up, several synergies were proposed for future action – highlighting the links between breeding and aquaculture development. Finally, it was proposed to create an EATiP Aquaculture Breeding Working Group to cooperate with ETP FABRE.

Mr Bram Moeskops, Scientific Coordinator of the ETP on Organics, presented the context of organic aquaculture and the views of this ETP on research needs. These were summarised as being

- Sustainable feed
- Fish health and welfare
- Breeding
- Juvenile production
- Organic seaweed

Details of the RTD requirements were provided for each component, noting that a new EU project will be made on organic aquaculture, looking to provide science-based knowledge that will support and develop the current Organic Regulation (Regulation 710 (2009)).

Mr Declan O'Brien reported on the development of the ETP on Global Animal Health, its Vision and SRA. In FP7, 2 ERA-NETs were put into place (EMIDA and ANIHWA), alongside a Global Network for Animal Disease Research. One of the major projects of ETP GAH was DISCONTTOOLS , completed in February 2013. Major outputs of the project were:

1. Disease database – 52 diseases
2. Gap analysis for each disease
3. Prioritisation model on public website
4. Methodology to identify & deploy new research technologies in the animal health research world

A major issue identified has been the promotion of a coordinated approach to funding research. Within a detailed summary of the outputs generated, it was noted that DISCONTTOOLS had contributed to:

- Building consensus across stakeholders
- Focus on critical gaps

A core challenge for ETP GAH is how to make best use of €500m RTD investments from the public sector & €400m from the private sector and to hasten the arrival of new diagnostics, vaccines & pharmaceuticals

It is estimated that the disease burden is around 20% on animal production - valued at €141 billion. Improvements would reduce the overall cost by €28 billion! With an agreed SRA to work on identified gaps, it was put forward that fish diseases should be included within the scope of these efforts.

It was suggested that EATiP should apply pressure to impose developments; when cases exist where 40% of production can be lost to disease, it is necessary to move towards 2nd generation technologies for vaccines. These appear as an evident solution for growth in production. EATiP should have a higher role in knowledge management in this aspect and should cooperate with ETP GAH and other interest groups (e.g. the European Association of Fish Pathologists) to achieve this.

Alternative feed sources and fish health/welfare are very important issues for the ETP Organics' interest in aquaculture. It was pointed out that breeding for disease resistance was an evident need for the sector and that increased tolerance to new (plant-based) feed ingredients should also be a research priority. The development of vaccines should be examined jointly with ETPs GAH and Organics.

In the discussion that followed these presentations, there was overall agreement that much could be gained by examining the potential synergies proposed. In order to progress on these, it was suggested that a formal meeting between the Bio-Economy ETPs would be made so as to generate actions based on the proposals. Shortening the distance between industry/research is also seen as a common priority as is facilitating the impact of RTD results.

It was also noted that if socio-economic impact can be achieved, this will lead to higher levels of stakeholder and supply-chain engagement. Nonetheless, producers need to be able to grow and develop their economic activity so as to develop. The Chairman noted that, in the last 10 years, there has been next to no improvement in production efficiency in the Mediterranean sector.

There was much debate on how to improve knowledge management within the sector, where several participants felt that EATiP should take a more leading position on this topic. In the EATiP AGM that followed, it was proposed that a Working Group should be created so as to have firm proposals to submit to the next EATiP Meeting (March 2014).

For 'Mobilisation', examples were given on how the EATiP SRIA can be promoted and implemented.

Ms Alexandra Neyts, Manager of NTNU Marine, presented the progress of 'AquaExcel' – which stands for 'AQUAculture infrastructures for EXCELlence in European Fish research'. This important effort looks to create a Knowledge Hub where research and innovation are at the core with world class (open) Research infrastructures that are necessary to attract the best talent and industrial customers. This responds to European Research Infrastructure policy that aims to bring resources together and guarantee access to infrastructures everywhere in Europe, increasing capacity and performance and making best use of existing facilities. This is essential for the implementation of the EATiP SRIA, through its main goals.

- Integrate key aquaculture Research Infrastructures across Europe and promote their coordinated use and development
- Increase the awareness of existing European aquaculture Research Infrastructures and their capacities
- Harmonisation and standardisation of resources and practices and share knowledge
- Use existing industry-based research agendas (not create)
- Better measurements and standardized experimental animals □ 3Rs rule
- Enhance applicability of results at industrial scale
- Use technology to increase experimental capacities

AQUAEXCEL's goals are being achieved through:

1. Transnational Access
2. Networking Activities
3. Joint Research Activities

Details of how these are contributing are provided in the presentation.

Recommendations on how to move forward were the following:

- To promote close collaboration between EATiP and AQUAEXCEL to implement the SRIA
- How to structure this interaction?
 - Direct contact between TA leaders/facilitators and WP leaders
 - Joint workshop on Knowledge management
 - Joint planning of AQUAEXCEL follow-up (Horizon2020, EMFF)
 - Promotion of academia-industry partnerships in aquaculture - preparation of an aquaculture knowledge hub with regional clusters
 - Use long-term instruments for a further integration of research infrastructures (ESFRI, JPI Oceans, ...)

Dr Gill Marmelstein of AQUATT reviewed the progress of the EATiP Plan of Action, underlining that this is a live document that is not fixed in time. Participants were provided with the latest EATiP Plan of Action, defined by Thematic Area for review. It was underlined that collective, coordinated and strategic mobilisation is needed if the Vision is to be realised – covering the industry, the RTD community and policy levels. In noting the diversity and distribution of sectoral components, it is essential that it is recognised that the Plan of Action is not just about research needs – one also has to account for policy requirements and governance, knowledge transfer, networking and training. Within this, knowledge management is seen as being integral to creating value and responding to the societal challenges that have to be addressed by the new Framework Programme - Horizon 2020.

Dissemination and Cooperation

In looking at Dissemination and Cooperation, the participants were reminded of the achievements of 'Aquainnova' – EATiP's 'lighthouse' project – whose deliverables include a large number of Technical summaries of EC-funded projects concerning aquaculture. These are all housed in the library section of the EATiP website. Furthermore, the 'Aquainnova' deliverables are also published here, including the individual workshop debates and research prioritisation results.

Complementary actions that support this approach were also reported, notably for

- 'Euroshell', which is developing a more detailed approach to the needs of the European shellfish sector, and
- 'LARVANET' – a COST-supported multidisciplinary network that has examined critical success factors in larvae production in European aquaculture.

Mr Alistair Lane, Executive Director of the European Aquaculture Society, presented the progress of Euroshell, which is looking to

- Communicate scientific knowledge to producers
 - Using a Knowledge outputs portal
- Allow producers to express their needs & participate in research projects
 - And involves mapping the sector
- Prepare a vision and research agenda for the sector
 - And better integration of the sector in EATIP

The needs of a dedicated extension network, to improve cooperation and knowledge management, were presented and discussed.

Professor Marisol Izquierdo provided information on Larvanet – which, unfortunately, could not be presented in the meeting itself. This COST action finished recently and has been very active in its networking and workshop activities since 2008. It has developed a Vision for activities which include the development of:

- Advanced understanding of larval biology
- Larval quality indicators and predictors
- Improved production technology for the major farmed fish species

An important network for aquaculture, which has existed since 1996, is AquaTnet. Currently coordinated by the University of Stirling, it is the largest multidisciplinary European Education Network in the field of aquaculture, fisheries and aquatic resources management. John Bostock, from distance, provided an innovative presentation that covered the achievements and the future of AquaTnet, which – in the future – appears to be moving in the direction of creating new alliances, so as to promote its commitment to improved knowledge management. Mainly concerned with teaching, learning and accreditation, it was put forward that the debate on these aspects is opening up, especially concerning higher education, as institutions start to face up to changes brought on by globalisation, the Internet and the current European economic crisis - and the effects these are already having on industry and other aspects of society. Radical changes are foreseen – notably to create skill and knowledge alliances – building new bridges with industry. AquaTnet proposes that it can provide EATiP with an established network experienced in implementing EU policy in training, skills & lifelong learning. In reviewing its achievements, it was also noted that AquaTnet’s funding will end in 1 year and while the question of its future remains open, it is uncertain. AquaTnet’s sustainability will inevitably require a change in organisation and activities – and the question was raised as to whether this network could be linked to a closer role in achieving the Knowledge Management objectives of EATiP?

Discussion on this referred to the difficulties encountered in stimulating industrial interest in teaching, learning and accreditation – echoed by some of the Associations present. Nonetheless, it was agreed that the new approaches to alliances need to be examined so as to see how a future ‘AquaTnet’ could be implemented in line with the Alliance approach described.

Further to this point, **Ms Catherine Pons** of the EATiP Secretariat reported on ESCO – European Skills, Competences, Qualifications and Occupations, where previous work on the WAVE and VALLA L projects under the Leonardo da Vinci programme have led to aquaculture’s inclusion in this topic. Matching skills with vacancies is a priority for achieving efficiency in the labour market and ESCO exists to help to bridge the gaps between education and employment. ESCO will be:

- The solution to match CV’s to vacancies on a European scale
- Multilingual: available in 22 languages
- Simple, open, flexible and available free of charge

Aquaculture is dealt within the Agriculture, Forestry, Fisheries Reference Group of ESCO – which has received inputs from FEAP and AQUATT, following the WAVE/VALLA work on competences and their validation. In summary, the EU changes in approach to education need to be followed also for our sector. EATiP is updated thanks to its members and Knowledge Management experts (Thematic Area 6) and could consider - through a closer collaboration with AquaTnet – becoming the place for exchanges between the Aquaculture industry and the Aquaculture Education. The integration of aquaculture within ESCO can be seen as a clear achievement for the work done in past years on skills, competences and lifelong learning.

While the evident difficulties have been encountered in stimulating industrial interest in these educational components, it will be necessary to assess the impact of the ‘Alliance’ proposals on AquaTnet activities and hence the position of these activities in respect of EATiP.

Debate and Conclusions

The presentations and discussions that followed contributed to the debate on how EATiP should evolve in line with the new ETP strategy, accounting not only for its achievements but also on how additional developments could respond to the needs of both the industrial and RTD communities. Contributing to growth and development of the industrial components of the European aquaculture is essential.

Commission representatives put forward that EATiP should not only liaise with the other Bio-Economy ETPs but also other developing initiatives, such as the Fisheries Platform proposed. It was mentioned that ERANET funding, similar to that developed for Animal Health, could be advantageous for aquaculture since ERANETS can provide significant opportunities for prioritised research – nonetheless, this would need commitment from Member States. Cooperation has already been initiated with the Joint Programming Initiative (JPI) Oceans, which combines different funding mechanisms, and this JPI is currently looking at aquaculture opportunities.

An additional ambition for ETPs is that they should promote the involvement of the private sector in RTD actions and it was proposed that EATiP should try to map what RTD is being done in the private sector. The progression of ERANETS towards PPPs (Public-Private Partnerships) was also noted. The use of European Innovation Partnerships, dedicated to getting innovation into the field was also observed.

In debating 'mobilisation' and implementation of the EATiP SRIA, it was noted that the Member States are expected to prepare individual multi-annual plans for their aquaculture interests in the new CFP. It was agreed that formalised presentation of the EATiP Vision to research funders should be made at both EU and National levels. The EC should be requested to assist with such actions.

The question of how to mobilise SMEs in both RTD and EATiP actions was also discussed, raising the question of how to make such involvement attractive to SMEs, particularly for those who are yet to be involved in research. While SMEs are often leaders in applying innovation, it remains very difficult to get SMEs actively involved in European actions and initiatives – including EATiP itself. It was suggested that SMEs should have more contact with information providers – but that this should be in the context of the information they are looking for and that overload needs to be avoided.

It was recommended that EATiP establish a contact base, to help mediate on information supply, so that 'brokering' of relevant information/knowledge could be made easier. While specialised conferences are attracting higher levels of industrial participation, it is necessary to find the right means to communicate and extend research and innovation to the SMEs.

This discussion was taken up in the EATiP Assembly on the following day where it was proposed that the SME mobilisation issue should be examined in more detail. Just using projects to achieve this is difficult and awkward. Although positive examples can be identified, it was agreed that a network mapping exercise needs to be done so as to better understand how and where SMEs are present and interested. Encouraging the actions of National (Mirror) Platforms and/or similar entities appears as a viable option since they (should) have more direct contact with the SMEs.

From the RTD perspective, AquaExcel and other projects provide significant opportunities but this approach could be taken further. Projects have a finite timeline and it is necessary to have longer term stability to improve such actions. A stepwise review approach was recommended, but this will need organisation and coordination. It was agreed that EATiP would work on this so as to report with recommendations to the next Assembly in March 2014.

In conclusion, EATiP will take steps to review a number of different points so as to prepare recommendations for the next General Assembly, concerning:

1. Formalised presentation of the EATiP Vision and SRIA to funding agencies so as to stimulate realisation of the Plan of Action
2. Establish links and synergies with other Bio-Economy ETPs
 - a. Strategy discussion within EC-ETP workshop (end 2013-start 2014)
3. Recommendations for mobilisation of SMEs
4. Creation of a Working Group devoted to actions on fish health (e.g. with ETP GAH and EAFP)
5. Enhancement of collaboration with AquaExcel
6. Potential for EATiP actions on international cooperation on Science & Technology
7. Potential for integrating within EATiP activities the activities, actions and, where appropriate, the products of AquaMed, Euroshell, Larvanet and AquaTnet

The EATiP Board of Directors will take relevant actions to achieve these recommendations in the coming weeks.