

Welcome presentation & introduction - 'Developing Aquaculture in Europe'

Mr. Gustavo Larrazábal, Chairman of EATIP, made a short introductory welcome presentation to participants, thanking them for their presence and interest in EATiP work and activities. He noted the interesting presentations on the agenda and looked forward to the feedback from the Mirror Platform meeting that took place earlier. The Chairman reported on the decision of the EATiP Board of Directors to move forward on the review of EATiP's Vision and Strategic Research and Innovation Agenda, where the basic goals were to review where research actions had been initiated or completed since publication of the Vision in 2012 and to see in which areas existing or new priorities can be identified. He wished all participants a constructive and interesting meeting

EATiP – Actions and Activities in 2015-2016

Mr. Courtney Hough, General Secretary of EATiP, made a presentation covering the actions and progress of **EATiP during 2015-2016**.

EATiP is one of 7 BioEconomy ETPs, which are part of the external advice and societal engagement needed to implement Horizon 2020 and which have to contribute to the definition of the research priorities. These ETPs also have to provide input for annual assessment (by EC) and are regularly asked for opinions on research progress and needs.

The main questions for EATiP are how best to respond ? and how best to organize such responses ? Since, when EATiP is asked for priorities, justification has to be provided.

Actions in 2015

Presentations have been made on EATiP goals, organisation and function through EATiP representation at a range of different events, conferences and workshops, including ad-hoc EC Working Groups (BlueMed/International Cooperation).

Promoting synergies with other ETPs has also been achieved, notably with ETPs - FABRE, Waterborne, Textiles + Insects.

Contacts have been established with other organisations active in European aquaculture, notably:

- The General Fisheries Council of the Mediterranean (GFCM), which has a Committee on Aquaculture and has taken over the concept of a Multi-Stakeholder Platform for Aquaculture – covering the Mediterranean and the Black Sea (result of the Aquamed project). A presentation was made on this later in the meeting and a Memorandum of Cooperation has been prepared between GFCM and EATiP to cover development of this aspect. Work will start on this during 2016.
- EFARO is the European Fisheries and Aquaculture Research Organisation which recently re-activated its Aquaculture Working Group, chaired by Arne Fredheim (SINTEF) and where it has been agreed to investigate areas for cooperation; this is to be evaluated shortly.

International Cooperation was also of high attention during 2015, noting that EATiP was involved in the European project “AqAsemog” – looking at cooperation within ASEM (Asia-Europe Meeting) which highlighted difficulties in mobilising EU interests (primarily SMEs) to work with/in Asia.

During the year, the EC (DG Research and Innovation) requested analysis of potential for cooperation with

- ASEAN/SE ASIA → Call published in H2020 Work Programme (2016-2017) on Sustainable Food Security – SFS 24
- EU-USA-Canada (Galway statement – Marine Research)

EATiP INCO working group meetings were held in Brussels and Rotterdam (Aquaculture Europe 2015) to examine potential actions and activities.

Further to this, the potential interest of establishing European cooperative actions with China, Brazil and South Africa has been put forward.

It was agreed that EATiP would prepare a proposal as a response to the call SFS 24 proposal on international cooperation with South East Asia; this was prepared and submitted by a consortium composed of EATiP, Universities of Stirling, Wageningen and Ghent, International Center for Living Aquatic Resources, Universiti Malaysia Terengganu and Nonglam University Ho Chi Minh City. The proposal is titled “Promoting multi-stakeholder contributions to international cooperation on sustainable solutions for aquaculture development in South-East Asia” – acronym “EURASTIP”. Many EATiP members were nominated as 3rd parties to participate in the work programme defined. In June 2016, EATiP was informed of favourable evaluation and that procedure towards the grant agreement could be engaged.

Engagement with MiPs/SMEs has been a prime concern for EATiP since its creation – nonetheless, the questions of how best to support and interface with Mirror Platforms and multi-stakeholder Clusters remains to be defined. It is hoped to develop actions to improve SME involvement in research and Innovation and meetings on this subject were held in the 2015 AGM, Aquaculture Europe 2015 and this morning – conclusions and recommendations to be presented tomorrow.

The 2nd EATiP-EAS Day was organised within Aquaculture Europe – covering “Fish welfare and losses during the production cycle - defining issues and identifying research needs”. The full report on the debates, conclusions and recommendations is available on the EATiP website.

Since this has become a regular event within the Aquaculture Europe conference, it is hoped to decide on a theme for this year, the title “Growth vs Stagnation” has been proposed, where questions raised at the recent High Level EC conference on aquaculture should be answered.

- This event, whose organisation will be completed during the summer, will be held on Thursday 22nd September 2016 in Aquaculture Europe (Edinburgh, Scotland)

AquaExcel²⁰²⁰, a new research infrastructures project that included transnational access for research activities, started in late 2015. EATiP is responsible for providing and supporting an Industry/Research Advisory Panel that will assess and broker promising projects and activities. Drawn from EATiP Membership, using (where available) the Thematic Areas chairpersons, the first IRAP Panel meeting will be in Crete in the autumn of 2016, during the annual meeting of the project.

- Preliminary panel members: Hamish Rodger, Ole Christensen, Kjell Maroni, Fernando Torrent, Arne Sorvig, Arnault Chaperon

The EATiP Board of Directors agreed in February 2016 that a revision of the **EATiP Strategic Research and Innovation Agenda (SRIA)** should be initiated, for completion by the end of 2016, if possible. It was felt that, at 4 years after completion, that there was a need to review, in terms of research issues relative to the SRIA,

- What has been done ?
- What are the priorities ?
- Are there new subjects/issues identified ?

To achieve this, a survey has been initiated that can be accessed by the EATiP website.

Consultation with other Technology Platforms, including FABRE TP, and EFARO will also be engaged so as to have the broadest overview and consensus on priorities.

European actions

As previously mentioned, EATiP has been active in participating in efforts and discussions on International Cooperation with EC services in DG RTD and Innovation.

EATiP also provided support for the “BlueMed” initiative that was launched in Venice (November 2015), where progress should be reported later in 2016 but did not respond to the call on “Improving technical performance in Mediterranean Aquaculture” (SFS23) since EATiP does not participate in competitive research calls.

EATiP is represented as a Stakeholder Adviser (Stefan Meyer) in the new CERES project (Climate Change and European Aquatic Resources) which is one of 2 H2020 projects that will look at how climate changes may affect European aquaculture. Presentations on CERES and CLIMEFISH, the 2nd project, were made during the AGM.

EATiP has been appointed to the new Bioeconomy Panel of the EC (for the period 2016-2018); Courtney Hough participated in the 1st meeting on 17th June 2016, which will set out what is anticipated to be achieved by the Panel for the coming year. EATiP members are encouraged to follow this and participate where appropriate.

COFASP is an ERA-NET created to directly address actions envisaged within fisheries, aquaculture and seafood. It was created as under the KBBE theme in FP7, and is part of the Europe 2020 strategy, which recognises bioeconomy as an important part of the strategy. The main objectives of COFASP are:

1. To lay the basis for exploitation according to the precautionary principles and to enhance innovation in and competitiveness of the primary sectors fisheries and aquaculture as well as subsequent seafood processing and distribution to the consumer.
2. To define the science, information and data necessary to underpin the revision of the CFP and to ensure its successful implementation by designing complementary national research programmes and outlining monitoring and information/data sharing systems needed.

Courtney Hough represents EATiP on the Advisory Board for this, providing information from EATiP actions as support for COFASP calls and actions.

In summing up, the Secretary thanked EATiP's motivated members, EATiP's professional contacts throughout Europe, the President and the Board of Directors and colleagues in the Secretariat for their contributions to EATiP's actions and work

Horizon 2020 & aquaculture research

EC priorities & discussion, Mr. Jacques Fuchs, Marine Resources Unit DG R&I

A comprehensive presentation on the Blue Economy and priorities, covering a number of new opportunities (Aquaponics, floating offshore systems) and the strategic framework for Blue Growth.

Food 2030 was highlighted - **Research and Innovation for Future-proofing our Nutrition and Food Systems** – with drivers and priorities, where aquaculture should have an important role to play. An important conference on this topic will take place on 13th October 2016.

In addition, there is a new **Information sharing platform** at

<http://ec.europa.eu/research/bioeconomy/index.cfm?lg=en&pg=highlights#mip>

Mr. Fuchs also noted the **Blue Economy Business and Science Forum – The Hamburg Summit** which will be held on 12-13 September 2016

Revising EATiP's Strategic Research & Innovation Agenda

After an introduction covering the reasoning for revising the SRIA, a broad debate on aquaculture development and needs ensued, with active participation of participants. Topics covered:

- **Closed containment (cages) – enabling technologies for growth**
- **Large-scale (offshore) mussel farming**
- **Legislative background/licensing-permits required for offshore activities**
- **Need for a long-term view on development**
 - Technical issues need resolving – e.g. mortalities
- **If significant growth occurs, need to create and improve the market**
- **Diversification of production systems is a real issue**
 - Need several types of production systems
 - Improved control over inlet/outlet water
 - Maintenance of health and how to combat disease/infections in production systems
 - Resolving mortalities (unexplained) remains a top priority
- **Assessing Economic risk vs. Technical Risk is a barrier**
- **Legislation and Insurance seen as major barriers for offshore fish farming**
 - Need experience and skills to be a (successful) fish farmer – going offshore makes it more difficult
 - New management mechanisms/systems needed
- **Licensing costs**
 - Development licence is 10% of a normal production license (Norway)
 - New offshore (development) licenses (Norway)
 - Applications from big companies and SMEs
 - Seen as an opportunity for growth
- **IMTA (Integrated Multi-trophic Aquaculture)**
 - Expectations on improved efficiency
 - EU IDREEM Project – expected to show how IMTA can work
 - Ocean Forest (Leroy/Bellona Foundation) is another example
- **Selective breeding is also seen as part of the solution**
 - Desirable traits include disease resistance
 - EU FISHBOOST project progressing on this

In thanking all for their contributions, the Chairman encouraged participants to register their opinions on the SRIA web survey.

European Project Updates

- **Innovation in Selective breeding**

'Fishboost' Mr. Jan Venneman, FABRE ETP

Gave a full and detailed presentation on priorities and topics that selective breeding can contribute to, as indicated by progress on the FISHBOOST project/

- **Effects of Climate change on aquaculture**

2 new projects were presented, 'Climefish' and 'CERES', both of which started recently. The presentations, made by

- **Dr. Elizabeth Ytteborg, Nofima for 'Climefish'**
- **Prof. Myron Peck, Univ. Hamburg for 'Ceres'**

Outlined the scope and ambitions of each project, which will look to provide solutions and direction on the effects on aquaculture of climate change.

- **European project developments**

- **'Oraqua' – organic aquaculture Mr. JP Blancheton, IFREMER**

Mr. Blancheton was unable to attend the meeting but provided a presentation on the progress of 'ORAQUA', which held a stakeholder meeting in October 2015 and will have a progress review in Mestre (Italy) shortly after this meeting. The presentation highlighted a range of priority topics that have been addressed within the project and current opinions and positions.

- **'AquaExcel²⁰²⁰' – research infrastructures, Mr. John Bostock, Univ. Stirling**

'AquaExcel²⁰²⁰' is a continuation of the AquaExcel project, which provides trans-national access to research infrastructures throughout Europe. John Bostock of Stirling University provided an overview of the ambitions of 'AquaExcel²⁰²⁰', noting that it includes 22 partners and 39 research facilities. The main goal is to integrate and open the key aquaculture research facilities in Europe, covering all fish culture systems and competences. Full details of how 'AquaExcel²⁰²⁰' will function are provided in the presentation.

International Cooperation

Prof. Patrick Sorgeloos – Chair INCO Working Group

Prof. Sorgeloos made a comprehensive description on the background and reasons for the EURASTIP Proposal (SFS24). His presentation also covered:

- ASEAN cooperation in 2014-2015
- Possibilities for Brazil-EU cooperation on aquaculture
- Training and technical assistance missions to Myanmar, Cambodia and Laos
- Information on algae production (EABA)
- The World Ocean Council 'Sustainable Ocean Summit'

The Secretary gave a brief description on progress on work related to the Galway Statement (EU-Canada-US) where it was also reported that the CERES (Climate change) project is to link as well as with the OIRAQ project, managed by ICES. This extensive network will be stabilised in a meeting in Edinburgh (around Aquaculture Europe).

EATiP actions in 2016

1) Cooperation between EATiP and GFCM

Mr. Fabio Massa, GFCM

As previously described, the EATiP is cooperating with the GFCM and has developed a Workplan for 2016-2019. Mr. Massa made a presentation on the work of the GFCM and recent achievements, covering the details of the cooperative workplan made to develop and support the Multi-Stakeholder Platform foreseen in the EU 'AquaMed' project.

2) Cooperation between EATiP and EFARO

Dr. Arne Fredheim, SINTEF/EFARO

Dr. Fredheim described EFARO and its Aquaculture Working Group, noting that several members of EFARO are also members of EATiP.

Focus in cooperation with EATiP was given to

- Strengthening the vision on Aquaculture and Blue Growth anticipating on new drivers; focussed, practical, making a difference; create impact
- One integrated vision/voice/message: untied information and message towards EU exchange of information and participation in events
- Shared vision on new drivers at the October 2016 Food 2030 Conference

It was also felt that such cooperation would benefit from linking to the ICES aquaculture working group. Evidently, many of these points can be achieved by cooperating on the review of the EATiP SRIA, where it is broadly felt that a single Vision and a single SRIA are needed.

It was noted that position papers on topics of interest are missing; these papers are needed as strategic documents for the public and for administrations. Such topics include, for example, GMOs, MPAs and Aquaculture...

3) EATiP-EAS Day 2016

The meeting agreed that the title "DEVELOPMENT vs. STAGNATION" is appropriate.

The day will address "Defining issues and identifying needs" and it will be held in Aquaculture Europe 2016, Edinburgh - Thursday, September 22, 10h30 to 17h00.

8th Annual General Meeting of EATiP

1. Overview & conclusions of Debates

- a. The Chairman expressed satisfaction on the content and quality of the meeting, noting the high level of interest in the presentations and debates of the Annual meeting.
- b. New members of EATiP were invited to present themselves to the Assembly, including
 - i. IMR (Institute of Marine Research) of Norway,
 - ii. Sorgeloos4Aquaculture of Belgium,
 - iii. DHI (Managing water environments) of Denmark,
 - iv. Nesne (electronic design and consulting) of Turkey

2. Secretary's Report

- a. Provided as a written report, and approved without comment

3. Reports on Representation/Coordination role of EATiP

• Mirror Platforms

- Stefan Meyer, speaking on behalf of the MIP Group, described how they had initiated a mapping exercise of multi-stakeholder 'clusters' in the Mediterranean, defining geographical representation.
- After a MIP Meeting in Rotterdam in October 2015, a request was made to the Board to provide guidance on how to best develop the MIP activities within EATiP.
- A key issue is the scale of difference between clusters/MiP, where
 - Aquacircle (DK) has 50 companies active
 - AkvaArena (NO) has +/- 60 active companies
 - Looking to become a new Centre of Excellence
 - HunAtip (HU) is engaged in +/-20 research projects
- Fabio Massa explained that the GFCM-EATiP cooperation is looking to National and local interests, where it is essential to establish a clear process of dialogue
- Richard Fitzgerald is starting the GFCM Study on multi-stakeholder 'clusters' in the Mediterranean and noted that such platforms are the place for constructive dialogues and that part of the study is to recommend structure/function.
- It was reported that ITAQUA is being created as an Italian platform, where Giovanna Marino is involved.
- Stefan Meyer informed that the MIP Working Group Meeting of 6 June 2016 had been successful, that it had looked at a range of different issues (including how best to work within EATiP) and that a full report would be provided shortly after the AGM.
- Important points are:
 - Implementation of the Vision/SRIA at national level is a job for the MIPs
 - 9 MIPs known currently – should be seen as EATiP Members
 - Need a Terms of Reference doc
 - Low (financial) entrance fee – since many don't have much budget
 - Need to improve EATiP-MIP/MIP-MIP communication
- An EATiP Board decision/position is needed to cover MIP structure, governance and representation in such cooperation.
- David Murphy (AquaTT) requested more support (including financial) from EATiP for the MIPs.
 - The Chairman indicated it was difficult to finance individual MIP secretariats.
 - Could budget be allocated by EATiP over the long term?
 - Implement strategic actions for MIPs at National level ?
 - Make MIPs a priority for EATiP.
- The Chairman recognised that EATiP has to find a way to support the MIPs but that it is neither clear nor easy. The Board will examine what it can do, and will provide Terms of Reference for recognition of individual Mirror Platforms as EATiP Members.

- **International Cooperation**
 - Prof. Patrick Sorgeloos informed that there would be promotion of the EU_ASEAN dialogue for industry in 2017
 - There is great concern about soil deprivation and salinization of aquaculture ponds.
 - ASEAN is trying to improve dialogue – using the Marine Technology Committee.
 - Definitely interested in the work of EATiP
 - Possible meeting in Myanmar in 2017
 - Noted the upcoming Free Trade Agreements with S Korea and Japan (end 2016)
 - He also put forward that it is crucial that EATiP be involved with Brazil
 - High possibilities for industry to be active
 - Workshop in Edinburgh on this topic.
 - Noted that the EC is trying to link North-South in the Atlantic Ocean perspective.
- **Skill development (future of AquaTnet)**
 - AquaTnet was a successful and longstanding Europe-wide network for supporting skill development and training in aquaculture. Since EC funding stopped (in 2014), great difficulties have been encountered in assuring present and future work, although Stirling University has maintained a secretariat function.
 - In the short term, EU funding for a follow-up to AquaTnet looks bleak.
 - It is hoped to give some impetus to this activity through the EURASTIP proposal.
- **Bioeconomy Panel**
 - The Secretary reported that EATiP has been accepted as an organisational member of the EC Bioeconomy panel, that he will attend the first meeting in mid-June and will report on anticipated future work and expectations for participation.
- **Aquaculture Advisory Council (AAC)**
 - The Secretary reported that the EC (DG MARE) has advised that EATiP cannot be a full member of the AAC since it already has an advisory position to the EC, since it is an official European Technology Platform.
 - The AAC is under creation at this time and it is likely that EATiP will be called upon, as an observer, to inform on research and innovation activities and needs.

4. EATiP Finances

The Secretary presented the financial report for EATiP in 2015 and a proposed budget for 2016, underlining that no allowance had been made for EURASTIP in 2016 (still only a proposal) and that the major part of the grant received for AquaExcel²⁰²⁰ in 2015 had been transferred to 2016, since little work had been done in 2015.

Given financial status of the EATiP, it is proposed that only modest representation and promotion activities be achieved in 2016.

See full financial report for details.

- a. **Approval of EATiP Accounts 2015**
 - i. Approved by the Assembly
- b. **Presentation of EATiP Budget 2016**
 - i. Approved by the Assembly

With no further business, the Chairman thanked the participants for the contributions and active participation and closed the 8th Annual General Meeting of the EATiP.