



## EUROPEAN INLAND FISHERIES AND AQUACULTURE ADVISORY COMMISSION

### Twenty-eighth Session

Lillehammer, Norway, 17–19 June 2015

### REPORT ON INTERSESSIONAL ACTIVITIES OF THE TECHNICAL AND SCIENTIFIC COMMITTEE (TSC)

#### 1. Background

The Technical and Scientific Committee (TSC) works under the coordination of the Management Committee (MC). The TSC was established to support and strengthen the work of the Commission. The TSC consists of chairperson and six members elected by the Commission during session.

The main tasks of the TSC are to provide recommendation, evaluation and monitoring results to the MC to support the decision making process. The operation of the Commission is illustrated in Figures 1 and 2 and the more detailed tasks according to the Rules of Procedure in Chapter 2. This document contains the work report of the TSC for the intersessional period October 2012 – June 2015.

#### 2. Objectives of TSC

The objectives of TSC are:

- make, review, evaluate and as appropriate recommend to the Management Committee proposals for programmes or projects to be carried out by the Commission in accordance with these Rules;
- develop Terms of Reference for programmes/projects and monitor project implementation against the Terms of Reference;
- provide technical oversight, monitoring and evaluation of projects and related programme of work activities;
- formulate and draft technical and scientific advice for consideration by the Management Committee; and
- function as an editorial and publications committee.

### **3. Work report**

#### **3.1 The TSC**

The 27<sup>th</sup> Commission selected Teppo Vehanen (Finland) as the chairperson for the TSC. The selected members for the intersessional period October 2012 – June 2015 were: Joe Caffrey (Ireland), Gérard Castelnaud (France), Colin Bean (Scotland), Raine Kortet (Finland), Piotr Parasiewicz (Poland) and Marina Piria (Croatia).

#### **3.2 EIFAAC Working parties into EIFAAC projects**

Under the reconstruction of EIFAAF the continuing Working Parties were reformed into EIFAAC projects. First Special Session of the Commission in October 2011 adopted new Rules of Procedure, where it has been agreed to recommend a continuation of an EIFAAC Working Party as a project. Three of the Working Parties were evaluated by TSC, accepted by MC, and translated into EIFAAC projects. These are “Developing Advice on Sustainable Management Actions on Cormorant Populations” (Manager: Petri Heinimaa), “Joint EIFAAC/ICES Working Group on Eel (WGEEL)” (Manager: Alan Walker) and “Development of Guidelines on the design of nature-like passes” (Manager: Andreas Zitek).

From 2014 the name of the WGEEL -project has been changed to “Joint EIFAAC/ICES/GFCM Working Group on Eel (WGEEL)”. The GFCM (General Fisheries Commission for the Mediterranean) has been operating on a joint basis with EIFAAC and ICES on European Eel in this project.

The project templates of these projects are presented in the Appendix 1.

#### **3.3 New projects**

Proposals for new EIFAAC projects may be developed by the Technical and Scientific Committee, a Member, a donor, a partner organization or an independent partner institution. According to the Rules of Procedure the Technical and Scientific Committee shall review and evaluate each project proposal, taking into account the following criteria:

- a) the project proposal is consistent with the objectives and functions of the Commission and with the terms of its Agreement;
- b) the project outcomes shall have relevance to one or more Members of the Commission;
- c) to the extent possible, the project proposal is forward-looking, proactive and results.

After the TSC has evaluated the project proposal it forwards it’s recommendation to the MC. Once project is accepted a project template is filled.

During the intersession the TSC has evaluated five new project proposals and one totally renewed project, which were recommend and accepted by the Management Committee as new EIFAAC projects. These projects are: “Management / Threat of Aquatic Invasive Species in Europe” (Manager: Joe Caffrey, Ireland), “EIFAAC Support to Fish Passage 2015 Conference” (Manager: Teppo Vehanen), “Downstream Passage of Fish at Hydropower Dams” (Manager: Kieran McCarthy), “EIFAAC Symposium on Recreational Fishing in Inland Waters” (Manager: Arne Eggreide) and “EIFAAC Project on Ecohydropower” (Manager: Piotr Parasiewicz). The Ecohydropower project was later cancelled by the manager due to difficulties in finding required external funding.

The project “Welfare of Fishes in Aquaculture” was renewed by the new project manager Helmut Segner. The project proposal was evaluated by TSC and later accepted by MC.

### **3.4 Project proposals**

One project proposal is currently under review as a new EIFAAC project: “Monitoring the Performance of Fish Passes; CEN standard” (Manager: Emma Washburn).

### **3.5 Project monitoring**

The Technical and Scientific Committee shall require each project manager to report no less than twice a year. The TSC has asked and received these progress reports twice each year. The TSC reports to MC about the progress of the projects.

The progress reports of the projects (Dec.2014) are presented in Appendix 2, expect those projects that have recently started. The progress reports of all the projects will be updated for the 28th EIFAAC Session.

### **3.6 Editorial issues**

The project “Threat of Aquatic Invasive Species in Europe” (Manager: Joe Caffrey, Ireland) has delivered it’s report to be published in the EIFAAC Occasional Papers. The TSC has reviewed the paper and it is accepted for printing.

### **3.7 Other activities**

The EIFAAC TSC run a one day Workshop on Stock Enhancement on Monday 7 July 2014 in Hull, UK, as part of the Fisheries Society of the British Isles Annual International Symposium “Integrated Perspectives on Fish Stock Enhancement”. The symposium was organised by Hull International Fisheries Institute (HIFI), University of Hull, UK and Humboldt-University of Berlin and IGB, Berlin, Germany in collaboration with the Fisheries Society of the British Isles (FSBI) and EIFAAC.

**Appendix 1: Project templates****EIFAAC PROJECT****Developing sustainable management actions on Cormorant populations**

<b>PRELIMINARY</b>	
<b>a. Owner</b>	EIFAAC
<b>b. Role of EIFAAC</b>	Advising liaison group and member states. Development of a pan-European Cormorant action plan. Collect, assess, gather, identify and disseminate relevant information from different sources.
<b>Role FOR EIFAAC</b>	Report and advice on the results of the work on the ToR.
<b>c. Last EIFAC review</b>	2014
<b>d. Recommendation of TSC</b>	
<b>1. OBJECTIVE AND EXPECTED OUTCOME</b>	
<b>1.1 Purpose/objective<sup>1</sup></b>	Participation in different projects has developed the understanding in fish, fisheries and Cormorants interactions and in perspectives of different stakeholders. A pan-European management plan has been already for a long time on the advisory list of EIFAAC. Only national, regional and local management actions have appeared but a pan-European dimension has been unreachable. The amount of Cormorants is still gradually increasing there off evolving interactions in new areas and polarizing situation in other areas. In the project the national situation for cormorants and experience on management plans will be updated yearly. The project will develop the elements (e.g. management actions on Cormorant colonies and migrating Cormorants, regional and total amount of sustainable reproduction and Cormorants amounts, successful management methods in controlling the amount of Cormorants in colonies or wintering areas/ roosts) for sustainable management actions on Cormorant populations on pan-European level, in cooperation with fish, fisheries, aquaculture and conservation interested organizations.
<b>1.2 Rationale<sup>2</sup></b>	The project is based on EIFAAC strategic objective II. Cormorants are protected species and they predate on endangered fish species causing severe damage to the fish stocks. Also fisheries and aquaculture has suffered losses while fighting with the Cormorants. Amount of Cormorants have increased fast and there are only local, regional or national management actions in some areas. There is urgent need to draw attention on the successful elements for management actions on larger scale. A key outcome is a coherent action plan to reduce the problems in a sustainable way. Key stakeholders are fish conservationists, fisher organizations, aquaculture companies, fisheries researchers, bird conservation organizations, fisheries and environment authorities.

<sup>1</sup> Statement of purpose for the project including goals and objectives.

<sup>2</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

<b>1.3 Benefits</b>	Diminishing problems in Cormorant – fish and fisheries interactions and thereby conserve fish species and stocks. Enhanced understanding of the Cormorant-fish-fisheries interactions to develop fisheries management.
<b>2. TERMS OF REFERENCE: PROGRAMME/PROJECT MANAGEMENT</b>	
<b>2.1 Terms of reference</b>	Inherited from the former WP <ul style="list-style-type: none"> <li>- Work for the pan-European Cormorant management actions</li> <li>- Collect from different sources information on the abundance and distribution of the cormorants in the member countries</li> <li>- Assess the interaction between cormorants and different stakeholders</li> <li>- Assess cormorant’s influence on socio-economic conditions of fisheries and aquaculture</li> <li>- Gather information of the new developments and experiences in controlling the number of cormorants and their influence on fish stocks, fisheries and aquaculture</li> <li>- Identify possible knowledge deficits for different geographical regions</li> <li>- Disseminate information through national focal points, project participants, project web-site and publications</li> </ul>
<b>2.2 Project Manager or Chair</b>	Presently Petri Heinimaa.
2.2.1 Management responsibilities <sup>3</sup>	Serve as the chair in meetings, present EIFAAC and project in meetings and give out presentations. Report to EIFAAC. Keep frequent contact with project participants.
<b>2.3 Participants<sup>4</sup></b>	
2.3.1 Identify participants	If the project will be approved, the participants will be reviewed, new interest for participation will be asked among member countries and stakeholders. Present participants represent 13 member countries and a wide experience in different Cormorant related projects. However the participation is expected to increase in future to new countries and stakeholders.
2.3.2 Include details of relevance of the participant to the project	Some of the participants and stakeholders provide data through their own activities.
2.3.3 State the capacity in which participation is carried out	Participation on own time and mainly also on own expense.
<b>2.4 Time frame</b>	Tree years 2011-2014, subject to review in 2012 EIFAAC Session.
<b>2.5 Benchmarks/deliverables<sup>5</sup></b>	<ol style="list-style-type: none"> <li>1. Update of national situation with Cormorants and experiences on management plans in member countries.</li> <li>2. Develop elements for management actions and relevant suggestions.</li> <li>3. Advice TSC on draft pan-European Cormorant Action Plan by the 2012 Session.</li> </ol>
<b>2.6 Methodology<sup>6</sup></b>	Work step by step with points set up in the ToR to support the drafting of the management actions. Meetings and workshop if financial possibilities to arrange them; otherwise information requests and exchange with email.

<sup>3</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>4</sup> Identify participants; include details of relevance of the participant to the project and the capacity in which participation is carried out.

<sup>5</sup> Start date, finish date, deadlines for specific deliverables.

<sup>6</sup> e.g. meetings, workshops, literature review, research.

	Use of reports provided by INTERCAFE and other projects. Workshop in Baltic Sea Region (winter 2013) and cooperation with EU-project Sustainable Management of Cormorant Populations.
<b>3. ADMINISTRATIVE REQUIREMENT</b>	
<b>3.1 EIFAAC Secretariat</b>	Information platform. Final approval of EIFAAC reports.
<b>3.2 Project management<sup>7</sup></b>	Data gathered for use from published sources or in cooperation from other organizations such as European Anglers Alliance (EAA). Project website in EIFAAC and on chairperson's institutes (FGFRI) website.
<b>3.3 Partnerships/linkages<sup>8</sup></b>	None.
<b>4. BUDGET/SUPPORT</b>	
<b>4.1 Budget required</b>	Support for arrangements of meetings and workshop are searched from various sources. Project is self sustained in arranging meetings.
4.1.1 Approval	No.
4.1.2 Confirmed source(s) of income	None.
4.1.3 Authorized expenditure	None.
<b>4.2 Resource requirements<sup>9</sup></b>	Financing for the meeting expenses from outside sources or by participants.
<b>4.3 In-kind contributions</b>	Own working time by the participants.
<b>5. REPORTING</b>	
<b>5.1 Requirements for reporting</b>	
5.1.1 Recipient of Report(s)	TSC
5.1.2 Intervals	Progress report yearly.
5.1.3 Benchmarks/deliverables	Progress report yearly on 1st March. Draft pan-European Cormorant Action Plan, 1 March 2012. Final report, 1 March 2014.
5.1.4 Dates	1 March 2012/ 1 March 2014
5.1.5 Other	

## ACRONYMS

EAA	: European Anglers Alliance
EIFAAC	: European Inland Fisheries and Aquaculture Advisory Commission
EU	: European Union
FGFRI	: Finnish Game and Fisheries Research Institute
INTERCAFE	: Interdisciplinary Initiative to Reduce Pan-European Cormorant-Fisheries Conflicts Project
ToR	: Terms of Reference
TSC	: Technical and Scientific Committee
WP	: Working Party

<sup>7</sup> e.g. management of data (e.g. classification, setting up a share point website), arrangement of meetings.

<sup>8</sup> Include any relevant legal partnership agreements and agreements on relevant aspects such as data.

<sup>9</sup> e.g. access to databases.

## EIFAAC PROJECT

TITLE<sup>10</sup>: Joint EIFAAC/ICES/GFCM Working Group on Eel (WGEEL)<sup>11</sup>

<b>PRELIMINARY</b>	
<b>a. Owner</b>	EIFAAC, ICES, GFCM
<b>b. Role of EIFAAC<sup>11</sup></b>	Covers inland waters, fisheries and aquaculture of member countries of EIFAAC, including Mediterranean countries, not covered by ICES. EIFAAC brings expertise and specific issues to the Working Group relating to the inland water phases of eel. EIFAAC and FAO have the structure and experience to disseminate advice and information to a wide audience of scientists, managers and stakeholders. This it will achieve through the EIFAAC Technical and Scientific Committee.
<b>1. OBJECTIVE AND EXPECTED OUTCOME</b>	
<b>1.1 Purpose</b>	To report on the status of the European and American eel stocks and to provide technical and scientific advice in support of the development and implementation of the EU Regulation for the recovery of the eel stock. To provide regular updates on the latest advances in eel stock assessment and science and to develop a means of post-evaluating the outcome of implemented management actions on the whole stock.
<b>1.2 Objectives<sup>12</sup></b>	There is a new co-ordination role required between EIFAAC, ICES and GFCM to cover the Mediterranean and North African area. The Working Group on Eel is a joint Expert Scientific Working Group between EIFAAC and ICES. There is liaison with the First EIFAAC/ICES/GFCM Workshop on Eel and the ICES/HELCOM Baltic Workshops on Eel. From 2014, the GFCM (General Fisheries Commission for the Mediterranean) is operating on a joint basis with EIFAAC and ICES on European Eel.
<b>1.3 Rationale<sup>13</sup></b>	The eel stock is in decline, recruitment is at an all time low and exploitation of the stock is currently unsustainable. ICES have advised that anthropogenic mortality should be reduced to as close to zero as possible and the EU have implemented a Regulation for the recovery of the stock. The EU Regulation requires Member States to put in place approved eel management plans and to monitor their implementation and outcomes. Eel has been listed as critically endangered by IUCN and as an Annex II species in CITES. The WGEEL brings together national and key agency scientists to provide the latest advice on the status of the stock, a framework for post-evaluation of the outcome of management actions and implementation of the Regulation, technical support to MSs for local assessments and eel management and updates on the latest developments in eel science pertinent to the objectives. The WGEEL is now listed in the EU DCF as an international expert group providing the basis for scientific advice and supported by DCF funding (DCF provides funds for nominated national participants to attend Expert Stock Assessment Groups).

<sup>10</sup> Please use Annex 1 to list all acronyms used in this template

<sup>11</sup> Explain what is the specific, unique role of EIFAAC compared to other groups/organisations that may deal with this subject, too? Has EIFAAC the role of being “lead agency”, “participant” or other role?

<sup>12</sup> Statement of the objective(s) (PLEASE NOTE: objectives need to be **SMART**: Specific, Measurable, Attainable, Relevant and Time-bound).

<sup>13</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

<b>1.4 Benefits</b>	<p>Annual stock assessment and observation on the status of the stock, including recruitment trends</p> <p>Local stock assessment methodologies</p> <p>Up to date (annual) best available scientific advice under ICES /EU Memorandum of Understanding</p> <p>Scientific support to the EU Regulation for the Recovery of the Eel Stock</p> <p>Scientific support for the EU determination of non-detriment findings for the trade of eel with respect to CITES listings</p> <p>Network of key eel scientists covering the north Atlantic, Baltic, Mediterranean areas and close links with Asian and Australasian scientists</p>
<b>2. PROJECT MANAGEMENT</b>	
<b>2.1 Project Manager or Chair</b>	Alan Walker (United Kingdom)
2.1.1 Management responsibilities <sup>14</sup>	<p>Chair the WGEEL</p> <p>Report to EIFAAC TSC, ICES ACOM, WGRECORDS, RG/ADG, SCICOM Groups.</p> <p>Set the meeting Agenda and workplan, co-ordinate the Country Reports and the running of the meeting, edit report, edit draft advice. Provide support to the Review Groups and Advice Drafting Groups where appropriate.</p>
<b>2.2 Participants<sup>15</sup> and stakeholders</b>	<p>Scientific Experts</p> <p>ICES National Nominations</p> <p>DCF Government Nominations</p> <p>EIFAAC Participants</p> <p>GFCM Participants</p> <p>Invited Experts</p>
2.2.1 Identify potential participants	<p>Scientists, data providers</p> <p>The Expert Group WGEEL needs a communication framework with managers and stakeholders.</p>
2.2.2. Identify stakeholders concerned and involved (answer not immediately needed but think about it and address it in the course of the project)	<p>Other linkages to SCICOM, WGRECORDS</p> <p>EU – DGMARE and DGENV (CITES)</p> <p>FAO</p> <p>Links with eel research Nominated and invited Scientists</p>
<b>2.3 Time frame<sup>16</sup></b>	Annual meetings
<b>2.4 Expected deliverables<sup>17</sup></b>	<p>One meeting per year (two in 2013 to support revision of the EU Regulation for recovery of eel stock)</p> <p>One technical report per year, including individual Country Reports to the WGEEL</p> <p>Draft scientific advice to ICES AD Group (ACOM)</p> <p>Each ToR is addressed annually.</p> <p>Report is organised into themes.</p>

<sup>14</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>15</sup> Identify potential participants; include details of relevance of the participant to the project and the capacity in which participation is carried out.

<sup>16</sup> Expected/intended duration of the project

<sup>17</sup> List potential project deliverables; e.g. Policy guidelines; best-practice guidelines; recommendations; scientific report; project report; etc



<b>2.5 Outline of Working Methodology</b> <sup>18</sup>	Meetings and correspondence, including an Annual Working Group involving those identified in C(i) and close liaison with Study Groups and Workshops. Country Reports on Eel stock and data updates. Collation and examination of national data collected under the DCF Collation and examination of national data reported to the EU
<b>3. BUDGET</b>	
<b>3.1 Budget</b> <sup>19</sup>	
<b>3.1.1 available</b>	No
<b>3.1.2 possible</b>	
<b>3.1.3 required</b>	An EIFAAC budget is not required.

### EIFAAC STRATEGIC OBJECTIVES

Select one of below list:

I.	Management-related issues and principles for inland fisheries and aquaculture	x
II.	Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture	
III.	Harmonization of cross-border and cross-sectoral governance and legal aspects of inland fisheries and aquaculture	x
IV.	Protection and restoration of the environment and species	x
V.	Trade and economic aspects of inland fisheries and aquaculture	x
VI.	Development of databases on inland fisheries and aquaculture	x
VII.	Climate change	x

#### ACRONYMS

ACOM	: Advisory Committee
ADG	: Advice Drafting Group
DCF	: Data Collection Framework
DG-ENV	: Directorate General for Environment
DG-MARE	: Directorate General for Maritime Affairs and Fisheries
EIFAAC	: European Inland Fisheries and Aquaculture Advisory Commission
EU	: European Union
FAO	: Food and Agriculture Organization
GFCM	: General Fisheries Commission for the Mediterranean
ICES	: International Council for the Exploration of the Sea
IUCN	: International Union for Conservation of Nature
HELCOM	: Baltic Marine Environment Protection Commission
MS	: Member States
RG	: Review Group
WGEEL	: Working Group on Eel
WGRECORDS	: Working Group on the Science Requirements to Support Conservation, Restoration and Management of Diadromous Species
SCICOM	: Science Committee

<sup>18</sup> How the project work to be is conducted e.g. meetings, workshops, literature review, research. A methodology should be provided for and closely linked with each of the objectives.

<sup>19</sup> In relation to budget, answer each of the three categories with “yes” or “no”, and provide details if appropriate/needed

## EIFAAC PROJECT

## TITLE: EIFAAC Project on “Development of Guidelines on the design of nature-like passes”

PRELIMINARY	
a. Owner <sup>20</sup>	EIFAAC
b. Role of EIFAAC <sup>21</sup>	EIFAAC is the umbrella organization for bringing together experts on an international level. EIFAAC can be considered the “motor” for developing sustainable approaches to fish passage solutions that are based on a large international experience far beyond Europe. The project involves engineers and biologists. EIFAAC engages in exchange with other organizations/institutions working on fish passage matters.
c. Advantages for EIFAAC of being involved in this project <sup>22</sup>	Access to up-to-date knowhow on fish passage issues.
d. Last EIFAC review	Rome 3-6 May 2011
e. Next EIFAAC review	
f. Recommendation of TSC	
1. OBJECTIVE AND EXPECTED OUTCOME	
1.1 Purpose	From within the broad field of “Fish Passage Best Practices“ that was originally covered by the “EIFAC <i>Ad hoc</i> Working Party on Fish Passage Best Practices”, a specific issue was singled out to be addressed by a project <sup>23</sup> . This project is aiming at the development of a set of criteria for the design of natural fish passes for upstream migration and finding a commonly agreed definition for natural fish passes. There is a need for the project to look at different approaches to the design of natural fish passes in different countries as the design criteria used in different countries are much more heterogenic than that for “technical passes”. Future projects may include also technical types of fish passes. The ultimate purpose of the project is to produce a guideline for the design of nature-like fish passes to restore connectivity for the benefit of biodiversity and fishery.
1.2 Objective <sup>24</sup>	A guideline for the construction of nature-like fish passes for different fish species and different hydraulic conditions by end of 2012
1.3 Rationale <sup>25</sup>	Use of common definitions, and the development of a common set of design criteria
1.4 Benefits	The “Guidelines” will provide guidance for the design of nature-like fish passes based on agreed design criteria according to the needs of the river type specific fish communities according to the

<sup>20</sup> Please use Annex 1 to list all acronyms used in this template

<sup>21</sup> Explain what is the specific, unique role of EIFAAC compared to other groups/organisations that may deal with this subject, too? Has EIFAAC the role of being “motor”, “participant” or else?

<sup>22</sup> How will the results of this project contribute to the achievement of the EIFAAC strategic objective(s), and contribute to/consolidate the reputation of EIFAAC as *the reference institution of competence* in the field of inland fisheries and aquaculture?

<sup>23</sup> For more information on the restructuring of EIFAAC and on abolishing Sub-Commissions as well as “Working Parties” in favor of a “project approach” see EIFAAC homepage <http://www.fao.org/fishery/rfb/eifaac/en>

<sup>24</sup> Statement of the objective/objectives (PLEASE NOTE: objectives need to be **SMART**: specific, measurable, attainable, relevant and time-bound).

<sup>25</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

	EU WFD. Nature-like fish passes are supposed to provide passage conditions for a wide variety of species and in different river zones (e.g. with different hydraulic conditions) and are thus suitable not only for migratory species.
<b>2. TERMS OF REFERENCE: PROGRAMME/PROJECT MANAGEMENT</b>	
<b>2.1 Terms of reference</b>	<ul style="list-style-type: none"> <li>• Redefine the meaning of “nature-like fish passes”</li> <li>• Define design criteria for different types of natural fish passes in relation to fish species and river zones</li> <li>• Produce Best Practice Guidelines (i.e. a publication) on upstream fish passage via natural fish passes, disseminating most relevant information otherwise not available</li> </ul>
<b>2.2 Project Manager or Chair</b>	Mr. Zitek Andreas (Austria)
2.2.1 Management responsibilities <sup>26</sup>	serve as chair, report to appropriate bodies, set agenda and work plan, edit report, edit draft advice
<b>2.3 Participants<sup>27</sup></b>	
2.3.1 Identify participants	Project on the “Development of Guidelines on nature-like passes”: four experts (names in alphabetical order) from four countries, i.e. ARMSTRONG Greg (UK), GEBLER Rolf (Germany), LARINIER Michel (France), ZITEK Andreas (Austria) EIFAAC Fish Passage Network: 34 members from 18 countries (names of experts in Annex 2)
2.3.2 Include details of relevance of the participant to the project	Experts working on the “Development of Guidelines on the design of nature-like passes” need to have specific knowledge on and practical experience with the design and functioning of the widest possible range of nature-like fish passage facilities
2.3.3 State the capacity in which participation is carried out	Emails, personal meetings in small group to work out the final draft, that will be sent around
<b>2.4 Time frame</b>	Until end of 2012, then re-definition of TORs
<b>2.5 Methodology<sup>28</sup></b>	Draft development via drop-box, meeting along conferences like the Ecohydraulics 2012 in Vienna; Publishing of the “Guidelines on nature-like passes” as FAO/EIFAAC publication
<b>2.6 Benchmarks/deliverables<sup>29</sup></b>	End of 2012 final deliverable
<b>3. ADMINISTRATIVE REQUIREMENTS</b>	
<b>3.1 EIFAAC Secretariat</b>	Thomas Moth-Poulsen
<b>3.2 Project management<sup>30</sup></b>	Email lists, data sharepoint (www.ecoscience.at), document drafts, dropbox
<b>3.3 Partnerships/linkages<sup>31</sup></b>	No binding partnerships, verbal agreements between the experts
<b>4. BUDGET/SUPPORT</b>	
<b>4.1 Budget required</b>	Travelling budget would be good, e.g. 10 000 € per meeting for main contributors

<sup>26</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>27</sup> Identify participants, include details of relevance of the participant to the project and the capacity in which participation is carried out.

<sup>28</sup> e.g. meetings, workshops, literature review, research. Needs to be provided for, and closely linked with, each of the objectives.

<sup>29</sup> Start date, finish date, deadlines for specific deliverables. Needs to be provided for, and closely linked with, each of the objectives.

<sup>30</sup> e.g. management of data (e.g. classification, setting up a share point website), arrangement of meetings, reporting.

<sup>31</sup> Include any relevant legal partnership agreements and agreements on relevant aspects such as data. If necessary, use the Annex 2 for listing further documents/details.

4.1.1 Approval	Not yet
4.1.2 Confirmed source(s) of income	Not yet
4.1.3 Authorized expenditure	Not yet
<b>4.2 Resource requirements</b> <sup>32</sup>	Time of participants
<b>4.3 In-kind contributions</b>	Expert working time; EIFAAC Secretariat working time
<b>5. REPORTING</b>	
<b>5.1 Requirements for reporting</b>	
5.1.1 Recipient of Report(s)	EIFAAC Secretariat is final recipient
5.1.2 Intervals	yearly
5.1.3 Benchmarks/deliverables	Final draft in autumn 2012, Meeting at Ecohydraulics 17.-21. September Vienna end of 2012 final deliverable
5.1.4 Dates	Final draft in autumn 2012 – latest until 15. December, Meeting at Ecohydraulics 17.-21. September Vienna end of 2012 final deliverable
5.1.5 Other	

## ACRONYMS

EIFAAC	: European Inland Fisheries and Aquaculture Advisory Commission
EU	: European Union
FAO	: Food and Agriculture Organization
WFD	: Water Framework Directive

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**List of the members of the EIFAAC Fish Passage Network (names of experts in alphabetical order)**

AKSU Seyit (Turkey), ARMSTRONG Greg (UK), BARAS Etienne (Belgium), CALLES Olle (Sweden), COMOGLIO Claudio (Italy), DUMONT Ulrich (Germany), FERRI Mauro (Italy), GEBLER Rolf-Jürgen (Germany), GREENBERG Larry (Sweden), GUTI Gábor (Hungary), JELONEK Marek (Poland), JEPSEN Niels (Denmark), JORMOLA Jukka (Finland), KAMULA Riitta (Ms) (Finland), KAUFMANN Thomas (Austria), KOUTRAKIS Manos (Greece), LAINE Anne (Ms) (Finland), LARINIER Michel (France), LUNDQVIST Hans (Sweden), MARMULLA Gerd (FAO), McCARTHY T. Kieran (Ireland), MIKHEEV Victor (Russian Federation), NAESJE Tor F. (Norway), OVIDIO Michael (Belgium), PAVLOV Dmitrii S. (Russian Federation), PETER Armin (Switzerland), PINI PRATO Enrico (Italy), REDEKER Marq (Germany), SCHMUTZ Stefan (Austria), TRAVADE Francois (France), TÜFEK Ömer Murat (Turkey), WANNINGEN Herman (the Netherlands), WINTER Erwin (the Netherlands), ZITEK Andreas (Austria)

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**List of documents, legal references and other issues identified (if necessary)**


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<sup>32</sup> e.g. access to databases.

## EIFAAC PROJECT

TITLE<sup>33</sup>: EIFAAC support to Fish Passage 2015 - symposium

PRELIMINARY	
<b>a. Owner</b>	EIFAAC
<b>b. Role of EIFAAC<sup>34</sup></b>	EIFAAC's role as a European wide organisation is exceptional to support and promote inland fisheries and aquaculture. Improving fish passage is one of the core issues in the development of inland fisheries and fish stocks.
1. OBJECTIVE AND EXPECTED OUTCOME	
<b>1.1 Purpose</b>	The goal of the Fish Passage 2015 –symposium is to share fish passage and river connectivity best practices with international colleagues beyond Europe and to attract worldwide experts. EIFAAC supports the symposium, and participation in the project also supports EIFAAC's work in the inland fisheries. During the project EIFAAC can build stronger partnerships with stakeholders in the field of fish passage. The project is linked to EIFAAC strategic objectives I and IV.
<b>1.2 Objectives<sup>35</sup></b>	The objectives for EIFAAC include better networking with stakeholders and international colleagues beyond Europe. The project also strengthens EIFAAC's position as a source of expert technical and scientific advice to support this sector. For EIFAAC there may be a possibility to share the information from the project outcomes through it's publication channels.
<b>1.3 Rationale<sup>36</sup></b>	EIFAAC wants to strengthen it's relationship with international stakeholders from beyond Europe and needs to be recognized as relevant partner and as a source of expert advice for the fish passage sector. EIFAAC should also engage with experts from outside Europe to ensure best practice in fish passage in Europe.
<b>1.4 Benefits</b>	There are general benefits to EIFAAC's work from better visibility. EIFAAC is among the organizers and also present during the symposium. Broadening the EIFAAC scope of influence. Emerging from this conference can also be an EIFAAC publication (case studies reported in the conference).
2. PROJECT MANAGEMENT	
<b>2.1 Project Manager or Chair</b>	Teppo Vehanen
<b>2.1.1 Management responsibilities<sup>37</sup></b>	Takes part in the organization group of the symposium as EIFAAC representative and informs EIFAAC about the development of the symposium arrangements.
<b>2.2 Participants<sup>38</sup> and stakeholders</b>	Cathal Gallagher EIFAAC Claudio Comoglio

<sup>33</sup> Please use Annex 1 to list all acronyms used in this template

<sup>34</sup> Explain what is the specific, unique role of EIFAAC compared to other groups/organisations that may deal with this subject, too? Has EIFAAC the role of being “lead agency”, “participant” or other role?

<sup>35</sup> Statement of the objective(s) (PLEASE NOTE: objectives need to be **SMART**: Specific, Measurable, Attainable, Relevant and Time-bound).

<sup>36</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

<sup>37</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>38</sup> Identify potential participants; include details of relevance of the participant to the project and the capacity in which participation is carried out.

2.2.1 Identify potential participants	Establish an Organising Committee for the conference, to represent acknowledged aquatic invasive species scientists, managers and policy makers within Europe. This committee will identify potential participants.
2.2.2. Identify stakeholders concerned and involved (answer not immediately needed but think about it and address it in the course of the project)	North American Fish Passage organisation, the Karlstad University (Sweden), Wanningen Water Consult (The Netherlands), Dutch Angling Association (The Netherlands) and the Project More room for fish (The Netherlands).
<b>2.3 Time frame<sup>39</sup></b>	Q2 2014 to Q3 2015
<b>2.4 Expected deliverables<sup>40</sup></b>	Scientific report, Project report
<b>2.5 Outline of Working Methodology<sup>41</sup></b>	Work includes meetings and the symposium.
<b>3. BUDGET</b>	
<b>3.1 Budget<sup>42</sup></b>	No
<b>3.1.1 available</b>	
<b>3.1.2 possible</b>	
<b>3.1.3 required</b>	An EIFAAC budget is not required.

## Appendix A

## EIFAAC STRATEGIC OBJECTIVES

Select one of below list:

I.	Management-related issues and principles for inland fisheries and aquaculture	
II.	Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture	
III.	Harmonization of cross-border and cross-sectoral governance and legal aspects of inland fisheries and aquaculture	
IV.	Protection and restoration of the environment and species	
V.	Trade and economic aspects of inland fisheries and aquaculture	
VI.	Development of databases on inland fisheries and aquaculture	
VII.	Climate change	

<sup>39</sup> Expected/intended duration of the project

<sup>40</sup> List potential project deliverables; e.g. Policy guidelines; best-practice guidelines; recommendations; scientific report; project report; etc

<sup>41</sup> How the project work to be is conducted e.g. meetings, workshops, literature review, research. A methodology should be provided for and closely linked with each of the objectives.

<sup>42</sup> In relation to budget, answer each of the three categories with “yes” or “no”, and provide details if appropriate/needed

## EIFAAC PROJECT

TITLE<sup>43</sup>: Management/Threat of Aquatic Invasive Species in Europe

<b>PRELIMINARY</b>	
<b>a. Owner</b>	EIFAAC
<b>b. Role of EIFAAC<sup>44</sup></b>	EIFAAC is uniquely positioned to address the issues associated with aquatic invasive species and to offer advice to its member states, who are geographically and climatically spread and manage diverse aquatic environments. Information gleaned through EIFAAC projects can be disseminated to a wider audience, including the EU.
<b>1. OBJECTIVE AND EXPECTED OUTCOME</b>	
<b>1.1 Purpose</b>	<p>To develop, process and provide <b>guidelines</b> to support member states in addressing the threat and reality of aquatic invasive species, using best international processes and practice. These guidelines will take the form of published conference proceedings, best practice publications and other relevant aids. The project goals listed below are closely allied to EIFAAC Strategic Objectives I to IV in Appendix A. Specific project goals include:</p> <ul style="list-style-type: none"> <li>- the development of a coordinated European policy to tackle the threats to fisheries and to native biodiversity posed by aquatic invasive species;</li> <li>the <b>compilation</b> of a Europe-wide <b>expert network</b> to provide assistance regarding identification, control and management, and possibly economic aspects associated with aquatic invasive species;</li> <li>- the development of a Europe-wide inventory of existing aquatic invasive species and a coordinated strategy to provide timely alerts in respect of imminent threats to member states where some of these invasives do not occur;</li> <li>- the development of <b>best practice</b> in relation to rapid reaction protocols;</li> <li>- the sharing of <b>research results</b> relating to the control or eradication of aquatic invasive species;</li> <li>- the development of international <b>best practice</b> for biosecurity, with particular emphasis on the specific needs of island nations viz. border controls and free passage of goods.</li> <li>- consideration will be given to the development of <b>tools</b> to quantify the impact of aquatic invasive species on fisheries ecosystems.</li> </ul>
<b>1.2 Objectives<sup>45</sup></b>	<ol style="list-style-type: none"> <li>1. To convene a conference of aquatic invasive species managers, scientists and policy makers from EIFAAC countries and from farther afield to drive the objectives below, by Q2 2013.</li> <li>2. To inform the development of the pending EU Invasive Species Strategy (which may result in the development of a European Directive), by Q2 2013. The conference proceedings will detail the outcomes from detailed workshop sessions and will aim to directly influence the draft Strategy. In addition, an oral presentation of the outcomes from the conference and workshops will be offered to the authors of this document.</li> <li>3. To develop a coordinated approach to forecasting (using best Risk Analysis practice) aquatic invasive species invasions, by Q4 2015.</li> </ol>

<sup>43</sup> Please use Annex 1 to list all acronyms used in this template

<sup>44</sup> Explain what is the specific, unique role of EIFAAC compared to other groups/organisations that may deal with this subject, too? Has EIFAAC the role of being “lead agency”, “participant” or other role?

<sup>45</sup> Statement of the objective(s) (PLEASE NOTE: objectives need to be **SMART**: Specific, Measurable, Attainable, Relevant and Time-bound).

	<p>4. To produce an effective deterrent to the advance of aquatic invasive species. This will involve harmonising alert, rapid reaction, control and management, and mitigation programmes that currently exist in member countries, by Q4 2015.</p> <p>5. To develop and coordinate international biosecurity protocols and approaches within Europe, by Q4 2015.</p>
<b>1.3 Rationale</b> <sup>46</sup>	<p>In Europe there is currently no concerted strategy to tackle aquatic invasive species. Many European countries have their own alert, rapid reaction, control and management, and overall mitigation programmes but no attempt to harmonize these in order to produce an effective and efficient deterrent to the advancing plight of aquatic invasive species has been made. Ireland is uniquely placed to host an international conference on aquatic invasive species as we are an island nation on the western edge of Europe and, currently have a relatively small number of high priority aquatic invasive species. The proposed conference will provide the mechanism or conduit to establish a network of European invasive species experts, with support from EIFAAC. This should take the form of an EIFAAC panel that be an integral part of this group. This expert network will contribute to the attainment of the above objectives.</p> <p>In addition, this expert group will assist in the development and coordination of international biosecurity protocols.</p> <p>The EU Invasive Species Strategy may result in development of a Directive in this area and, using the international expertise garnered from the conference and beyond, EIFAAC should be in a position to play a major role in its development and implementation. Towards this end, the project team will engage with the EU to assess what role it (and EIFAAC) can play.</p>
<b>1.4 Benefits</b>	<p>Emerging from this conference, in addition to peer-reviewed papers that were presented at the event, will be a collective expertise and commitment to tackle aquatic invasive species in a concerted and Europe-wide manner. It is intended that international committees (network in 1.1), with direct EIFAAC involvement, will be established to deliberate on targeted problems, with specific timelines for delivery of results.</p>
<b>2. PROJECT MANAGEMENT</b>	
<b>2.1 Project Manager or Chair</b>	Dr. Joe Caffrey
2.1.1 Management responsibilities <sup>47</sup>	Coordinate the development of the project team and the detailed project plan. Responsible for the conference delivery.
<b>2.2 Participants<sup>48</sup> and stakeholder</b>	
2.2.1 Identify potential participants	Establish an Organising Committee for the conference, to represent acknowledged aquatic invasive species scientists, managers and policy makers within Europe. This committee will identify potential participants.
2.2.2. Identify stakeholders concerned and involved (answer not immediately needed but think about it and address it in the course of the project)	European Anglers Alliance (EAA); EU; Boating Federations Customs; Horticulture; Pet trade; Fishery owners; Aquaculture; Water Managers; Clean Baltic Coalition

<sup>46</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

<sup>47</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>48</sup> Identify potential participants; include details of relevance of the participant to the project and the capacity in which participation is carried out.



<b>2.3 Time frame</b> <sup>49</sup>	Q2 2012 to Q4 2015: Review at this stage for full project implementation
<b>2.4 Expected deliverables</b> <sup>50</sup>	Plan and deliver an international conference on aquatic invasive species that will bring together leading experts from Europe and farther afield. Establish a committee of experts to coordinate the conference and ensure that all relevant delegates are invited to attend. At the conference workshops, led by leading world experts, key themes relating to the threats and management of aquatic invasive species will be discussed. A document that includes the speakers addresses to the conference and the outcome from the two days of workshops will issue in Q3 2013 and it is anticipated that this will inform policy development on invasive species in Europe. An expert group will be established following the conference, with significant input from EIFAAC countries, and will help steer the harmonisation of invasive species policy through Europe.
<b>2.5 Outline of Working Methodology</b> <sup>51</sup>	Establish an international organising committee that will input into the focus of the conference, the list of keynote and guest speakers and the delegate list. Hold a number of meetings, including one on-site meeting, to set up the conference and to agree on deliverables. At the conference agree on a committee that will drive the aquatic invasive species issue, particularly on behalf of EIFAAC, into the future. This committee should either contain key personnel from EIFAAC's MC or TSC, or be actively supported by a panel from within EIFAAC.
<b>3. BUDGET</b>	
<b>3.1 Budget</b> <sup>52</sup>	
<b>3.1.1 available</b>	Some fund and resources will be available from for the conference from within Ireland. Conference fees will help defray some of the costs of the conference
<b>3.1.2 possible</b>	
<b>3.1.3 required</b>	An EIFAAC budget is not required.

Appendix A

## EIFAAC STRATEGIC OBJECTIVES

Select one of below list:

I.	Management-related issues and principles for inland fisheries and aquaculture	
II.	Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture	
III.	Harmonization of cross-border and cross-sectoral governance and legal aspects of inland fisheries and aquaculture	
IV.	Protection and restoration of the environment and species	
V.	Trade and economic aspects of inland fisheries and aquaculture	
VI.	Development of databases on inland fisheries and aquaculture	
VII.	Climate change	

<sup>49</sup> Expected/intended duration of the project<sup>50</sup> List potential project deliverables; e.g. Policy guidelines; best-practice guidelines; recommendations; scientific report; project report; etc<sup>51</sup> How the project work to be is conducted e.g. meetings, workshops, literature review, research. A methodology should be provided for and closely linked with each of the objectives.<sup>52</sup> In relation to budget, answer each of the three categories with "yes" or "no", and provide details if appropriate/needed

## EIFAAC PROJECT

TITLE<sup>53</sup>: Towards the EIFAAC Symposium on Recreational Fishing

<b>PRELIMINARY</b>	
<b>a. Owner</b>	EIFAAC
<b>b. Role of EIFAAC<sup>54</sup></b>	EIFAAC is uniquely positioned to support and advise all parties interested in inland Fisheries and aquaculture. The recreational angling sector has many stakeholders and it is in EIFAACs interest and a core function to engage with and to support this sector.
<b>1. OBJECTIVE AND EXPECTED OUTCOME</b>	
<b>Please mention here at least one of the seven EIFAAC strategic objectives listed in Appendix A (below) to which this project is linked</b>	
<b>1.1 Purpose</b>	A purpose for the symposium is to attract new interest groups to supports EIFAACs work in the development of inland fisheries and in EIFAAC activities in general. - Encouraging enhanced stakeholder participation and communication, build stronger partnerships with anglers, fisheries-related institutions and stakeholders in the recreational angling sector.
<b>1.2 Objective<sup>55</sup></b>	- Facilitate an EIFAAC Symposium in 2014 on Recreational Angling. - Establish formal EIFAAC links with stakeholders in the European inland recreational fishing sector. - Place EIFAAC as the source of expert technical and scientific advice to support this sector.
<b>1.3 Rationale<sup>56</sup></b>	EIFAAC needs to engage with stakeholders that are currently outside of our current scope of influence. EIFAAC needs to be seen as relevant and as a source of expert advice for the recreational angling sector. EIFAAC should also engage internationally to ensure best practice in recreational fishing disseminated, this can be achieved through interaction with international bodies like NASCO and AFS (American Fisheries Society)
<b>1.4 Benefits</b>	In addition to the general benefits of EIFAAC symposia, this symposium should broaden EIFAAC scope of influence and enable direct access to some of our key stakeholders.
<b>2. PROJECT MANAGEMENT</b>	
<b>2.1 Project Manager or Chair</b>	[Step one: Arne Eggereide]
<b>2.1.1 Management responsibilities<sup>57</sup></b>	Coordinated the development of the project team and the detailed project plan (step one). Responsible for the conference delivery.
<b>2.2 Participants<sup>58</sup> and stakeholders</b>	Petri Heinimaa EIFAAC Miran Aprahamian EIFAAC Cathal Gallagher EIFAAC Håkan Carlstrand EIFAAC (or Swedish Agency for Marine and Water Management)

<sup>53</sup> Please use Annex 1 to list all acronyms used in this template

<sup>54</sup> Explain what is the specific, unique role of EIFAAC compared to other groups/organisations that may deal with this subject, too? Has EIFAAC the role of being “lead agency”, “participant” or other role?

<sup>55</sup> Statement of the objective(s) (PLEASE NOTE: objectives need to be **SMART**: Specific, Measurable, Attainable, Relevant and Time-bound).

<sup>56</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

<sup>57</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>58</sup> Identify potential participants; include details of relevance of the participant to the project and the capacity in which participation is carried out.

2.2.1 Identify potential participants	European Angling Alliance, American Fisheries Society (AFS), NASCO, Fishery Managers and regulators, Fishery Owners
2.2.2. Identify stakeholders concerned and involved (answer not immediately needed but think about it and address it in the course of the project)	Fishery Managers Water Managers Angling Groups Fishing rights owners Conservationists Fish ecologists Socio economists
<b>2.3 Time frame</b> <sup>59</sup>	Step one: 2013 Q1 2013 to Q2 2014: Review at this stage for full project implementation
<b>2.4 Expected deliverables</b> <sup>60</sup>	<p><b>Deliverable step one:</b></p> <ul style="list-style-type: none"> <li>- Plan for the content of the symposium</li> <li>- Revised project organization when time and host country for the 2014 session is decided</li> </ul> <p><b>General:</b> International conference and proceedings. EIFAAC Network on recreational angling. MOU (Memo of Understanding) with the AFS</p> <p><b>Themes to be delivered:</b> How and why is recreational fishing important, and how important (values)?</p> <ul style="list-style-type: none"> <li>- Pleasure</li> <li>- Benefits for people (health effects, food supply, income, social, cultural, etc.)</li> <li>- Increased engagement for use and protection of inland waters and nature in general</li> <li>- Dynamics of recreational fisheries in change,</li> </ul> <p><b>How to take care of and develop the recreational fisheries; the fishers (users), the stocks, and business aspects related to such objectives?</b></p> <ul style="list-style-type: none"> <li>- Recruiting new users</li> <li>- Facilitating different user groups</li> <li>- Developing fish stocks for recreational fisheries purposes (sustainable, optimizing socioeconomic value)</li> <li>- Restoration and protection of habitats</li> <li>- Management: developing management systems, etc, experience in different states,</li> </ul>
<b>2.5 Outline of Working Methodology</b> <sup>61</sup>	Establish Symposium EIFAAC Management committee. One face to face workshop and multi media conference calls, document sharing. Establish Symposium location and plans.

<sup>59</sup> Expected/intended duration of the project

<sup>60</sup> List potential project deliverables; e.g. Policy guidelines; best-practice guidelines; recommendations; scientific report; project report; etc

<sup>61</sup> How the project work to be is conducted e.g. meetings, workshops, literature review, research. A methodology should be provided for and closely linked with each of the objectives.

<b>3. BUDGET</b>	
<b>3.1 Budget<sup>62</sup></b>	Budget required
<b>3.1.1 available</b>	Symposium will need to be coordinated with the EIFACC Session and need support from the Session Coordinating Body. Conference Fees will also support the budget.
<b>3.1.2 possible</b>	Interest member states or other sector stakeholders may wish to contribute.
<b>3.1.3 required</b>	An EIFAAC budget is not required

Appendix A

**EIFAAC STRATEGIC OBJECTIVES**

Select one of below list:

I.	Management-related issues and principles for inland fisheries and aquaculture	x
II.	Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture	x
III.	Harmonization of cross-border and cross-sectoral governance and legal aspects of inland fisheries and aquaculture	
IV.	Protection and restoration of the environment and species	x
V.	Trade and economic aspects of inland fisheries and aquaculture	x
VI.	Development of databases on inland fisheries and aquaculture	
VII.	Climate change	x

## ACRONYMS

- AFS : American Fisheries Society  
EIFAAC : European Inland Fisheries and Aquaculture Advisory Commission  
MOU : Memo of Understanding  
NASCO : North Atlantic Salmon Conservation Organization

<sup>62</sup> In relation to budget, answer each of the three categories with “yes” or “no”, and provide details if appropriate/needed

## EIFAAC PROJECT

TITLE<sup>63</sup>: Welfare of Fishes in Aquaculture

PRELIMINARY	
<b>a. Owner</b>	EIFAAC
<b>b. Role of EIFAAC<sup>64</sup></b>	As welfare in animal husbandry is of increasing public concern and of increasing importance, it is required to have an independent institution to discuss, prepare and publish an independent state of the art concerning welfare of fishes in aquaculture. Formerly, a working group within the Council of Europe acted as this body, but due to internal reorganisation within Council of Europe these activities ended in 2008 and there is no indication of a restart of such activities. EIFAAC as an independent body would be the ideal body to fill this gap.
1. OBJECTIVE AND EXPECTED OUTCOME	
<b>1.1 Purpose</b>	The project is linked to Strategic Objective II: “Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture” (see also Table in Appendix A). Welfare of fishes in aquaculture is of increasing concern in the public discussion. The aim of the project is to prepare a statement including recommendations of EIFAAC to this topic
<b>1.2 Objectives<sup>65</sup></b>	The objective is to produce a summary of the actual knowledge concerning welfare of fishes in aquaculture and based on this knowledge to prepare a clear and concise statement by 2017.
<b>1.3 Rationale<sup>66</sup></b>	In the public the perception of welfare is based mainly on feelings or ideology and the point of view on this matter depends on particular interests. Scientific data are rarely taken into account. However, for certain species an increasing amount of scientific knowledge concerning welfare is available
<b>1.4 Benefits</b>	In this project scientific data and recommendations will be presented as well as field of necessary research in order to produce a scientific and objective statement.
2. PROJECT MANAGEMENT	
<b>2.1 Project Manager or Chair</b>	Helmut Segner
2.1.1 Management responsibilities <sup>67</sup>	I shall serve as coordinator of the proposed project. This includes coordination of the contributions of the participants of the working group, organisation of a workshop and the preparation of a final “statement” concerning welfare of fishes in aquaculture.
<b>2.2 Participants<sup>68</sup> and stakeholders</b>	
2.2.1 Identify potential participants	Members of the working group established are experts in the field of welfare of fishes. The search for/selection of further participants depends on the identification of possible knowledge lacks in the group.

<sup>63</sup> Please use Annex 1 to list all acronyms used in this template

<sup>64</sup> Explain what is the specific, unique role of EIFAAC compared to other groups/organisations that may deal with this subject, too? Has EIFAAC the role of being “lead agency”, “participant” or other role?

<sup>65</sup> Statement of the objective(s) (PLEASE NOTE: objectives need to be **SMART**: Specific, Measurable, Attainable, Relevant and Time-bound).

<sup>66</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

<sup>67</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>68</sup> Identify potential participants; include details of relevance of the participant to the project and the capacity in which participation is carried out.

2.2.2. Identify stakeholders concerned and involved (answer not immediately needed but think about it and address it in the course of the project)	Thünen Institute Germany, CTAQUA Spain, University of Porto Portugal, Marine Institute Ireland, LAZBW Germany, Universität Bern Swizerland, University of Veterinary Medicine Hannover Germany, Finnish Game and Fisheries Research Institute Finland, Riigimetsa Majandamise Keskus Estonia  Fish farmers are also concerned. It is intended, in a second (final) step to invite the European fish farmers organisation
<b>2.3 Time frame</b> <sup>69</sup>	Q3 2014 to Q4 2017. In total 3 and a half years: in 2014 the working group will be established the outlines for the report. From 2015 the first workshop will be held to define the working tasks. By the end of 2017 a scientific paper and EIFAAC statement will be produced.
<b>2.4 Expected deliverables</b> <sup>70</sup>	(a) A summary paper on the actual knowledge concerning welfare of fishes in aquaculture (b) An EIFAAC statement including recommendations concerning welfare of fishes in inland aquaculture.
<b>2.5 Outline of Working Methodology</b> <sup>71</sup>	The ad-hoc working group will collect and summarize the state of knowledge concerning welfare of fish in aquaculture. Based on the actual knowledge recommendations will be elaborated. In addition to the electronic communication a workshop will be held.
<b>3. BUDGET</b>	
<b>3.1 Budget</b> <sup>72</sup>	No
<b>3.1.1 available</b>	No
<b>3.1.2 possible</b>	Funds for travelling are attained through members own organizations.
<b>3.1.3 required</b>	No

**Appendix A****EIFAAC STRATEGIC OBJECTIVES**

Select one of below list:

I.	Management-related issues and principles for inland fisheries and aquaculture	x
II.	Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture	
III.	Harmonization of cross-border and cross-sectoral governance and legal aspects of inland fisheries and aquaculture	x
IV.	Protection and restoration of the environment and species	x
V.	Trade and economic aspects of inland fisheries and aquaculture	
VI.	Development of databases on inland fisheries and aquaculture	
VII.	Climate change	

<sup>69</sup> Expected/intended duration of the project

<sup>70</sup> List potential project deliverables; e.g. Policy guidelines; best-practice guidelines; recommendations; scientific report; project report; etc

<sup>71</sup> How the project work to be is conducted e.g. meetings, workshops, literature review, research. A methodology should be provided for and closely linked with each of the objectives.

<sup>72</sup> In relation to budget, answer each of the three categories with “yes” or “no”, and provide details if appropriate/needed

## EIFAAC PROJECT

TITLE<sup>73</sup>: Downstream Passage of Fish at Hydropower Dams

<b>PRELIMINARY</b>	
<b>a. Owner</b>	EIFAAC
<b>b. Role of EIFAAC<sup>74</sup></b>	EIFAAC is an independent organization that brings together experts to find solutions to common problems. As an international European organization EIFAAC promotes involvement of different countries and experts from various fields of water management and science. EIFAAC endorses sustainable methods that aim to improve the status of fish stocks and inland waters. Countries and organisations beyond Europe can also gain from the EIFAAC project. EIFAAC also engages in exchange with other organizations working on fish passage matters
<b>c. Advantages for EIFAAC of being involved in this project<sup>75</sup></b>	EIFAAC has access to relevant knowhow on downstream fish passage issues. EIFAAC has a possibility to publish this information as guidance to its members.
<b>1. OBJECTIVE AND EXPECTED OUTCOME</b>	
<b>Please mention here at least one of the seven EIFAAC strategic objectives listed in Appendix A (below) to which this project is linked</b>	
<b>1.1 Purpose</b>	Downstream migration of fish at hydropower dams has been identified as key factor affecting the restoration of fish stocks in regulated rivers. It is essential to reduce migration delays, damage and mortality to fish at these migration barriers. At the moment there is a lack of international comprehensive information about the knowledge on the downstream fish passage constructions and fish guidance. The project fills this gap by looking and collecting information from different approaches of the design of downstream migration methods and constructions in different countries. Based on this information project also aims to the development of a set of criteria for the design of downstream migration at hydropower plants. The ultimate aim of the project will be production of an edited publication that presents a summary of available knowledge and which could serve as a "road map" for future research and guidance on downstream fish passage.
<b>1.2 Objective<sup>76</sup></b>	A "state of the art" summary of knowledge of downstream passage and guidelines for the arrangement of downstream fish migration at hydropower plants by end of 2017.
<b>1.3 Rationale<sup>77</sup></b>	Sharing and use of common knowledge, and the development of a common set of design criteria
<b>1.4 Benefits</b>	Collected and published information provides pros and cons of the established downstream migration projects for future work. The guidelines will provide information for the design of downstream migration schemes in the future. Results are expected to benefit especially migratory fish stocks, but in broad sense the whole fish community. The results help to achieve EU WFD goals of good ecological status or good achievable potential of inland waters.

<sup>73</sup> Please use Annex 1 to list all acronyms used in this template

<sup>74</sup> Explain what is the specific, unique role of EIFAAC compared to other groups/organisations that may deal with this subject, too? Has EIFAAC the role of being "lead agency", "participant" or other role?

<sup>75</sup> How will the results of this project contribute to the achievement of the EIFAAC strategic objective(s), and contribute to/consolidate the reputation of EIFAAC as *the reference institution of competence* in the field of inland fisheries and aquaculture?

<sup>76</sup> Statement of the objective/objectives (PLEASE NOTE: objectives need to be **SMART**: Specific, Measurable, Attainable, Relevant and Time-bound).

<sup>77</sup> Reason for the project; why the project is important and key outcomes and stakeholders.

<b>2. PROJECT MANAGEMENT</b>	
<b>2.1 Project Manager or Chair</b>	Kieran McCarthy with Olle Calles and Eric de-Oliveira
2.1.1 Management responsibilities <sup>78</sup>	serve as manager of the project set agenda and work plan arrange workshops draft and edit the report report to EIFAAC
<b>2.2 Participants<sup>79</sup> and stakeholders</b>	
2.2.1 Identify potential participants	Expressions of support have been received from 11 European countries and it is anticipated that 12-14 members will attend the inaugural meeting in December 2014. It is likely that the numbers will increase once the project is formally launched. It is planned to encourage a greater level of participation in the final workshop, hosted by National University of Ireland and Electricity Ireland.
2.2.2. stakeholders concerned and involved (answer not immediately needed but think about it and address it in the course of the project)	It is anticipated that the project will include participants and supporters from the following countries: Sweden (Olle Calles, Arne Fjälling & Håkan Wickström), Russia (Dimitri Pavlov) Austria (Paul Jaeger), Netherlands (Herman Wanningen), Poland (Mariusz Malinowski), Belgium (Damien Sonny), France (Eric De-Olliviera, Eric Feunteun, Anthony Acou), Italy Claudio Comoglio, Greece (Manos Koutrakis), UK (Andy Turnpenny, Emma Washburn, Greg Armstrong) and Ireland (Kieran McCarthy, Dennis Doherty). This list is a provisional one and will be expanded following the inaugural meeting.
<b>2.3 Time frame<sup>80</sup></b>	Q4 2014 - Q4 2017
<b>2.4 Expected deliverables<sup>81</sup></b>	A project report to EIFAAC with best-practice guidelines, possible scientific report
<b>2.5 Outline of Working Methodology<sup>82</sup></b>	Establishment of a network of biologists and engineers involved in fish passage research in Europe. Organization of workshops on fish passage at hydropower dams. Provisional Schedule of Meetings: France (December, 2014), Netherlands (June, 2015), Austria, (November, 2015), Sweden (2016), Ireland, (2016).
<b>3. BUDGET</b>	
<b>3.1 Budget<sup>83</sup></b>	
<b>3.1.1 available</b>	No
<b>3.1.2 possible</b>	Yes, participants travel on their institutes funding
<b>3.1.3 required</b>	No EIFAAC budget required

<sup>78</sup> e.g., serve as chair, report to appropriate bodies, set agenda and work plan, coordinate country reports and running of the meeting, edit report, edit draft advice.

<sup>79</sup> Identify potential participants, include details of relevance of the participant to the project and the capacity in which participation is carried out.

<sup>80</sup> Expected/intended duration of the project

<sup>81</sup> List potential project deliverables, e.g. Policy guidelines; best-practice guidelines; recommendations; scientific report; project report; etc

<sup>82</sup> How the project work is to be conducted, e.g. meetings, workshops, literature review, research. A methodology should be provided for and closely linked with each of the objectives.

<sup>83</sup> In relation to budget, answer each of the three categories with “yes” or “no”, and provide details if appropriate/needed.



**EIFAAC STRATEGIC OBJECTIVES**

Select one of below list:

I.	Management-related issues and principles for inland fisheries and aquaculture	x
II.	Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture	
III.	Harmonization of cross-border and cross-sectoral governance and legal aspects of inland fisheries and aquaculture	
IV.	Protection and restoration of the environment and species	x
V.	Trade and economic aspects of inland fisheries and aquaculture	
VI.	Development of databases on inland fisheries and aquaculture	
VII.	Climate change	

## Appendix 2: Project Progress Report



## EIFAAC project progress reports May - June 2015

## PROGRESS REPORT

## EIFAAC Project “Developing Advice on Sustainable Management Actions on Cormorant Populations”

**Manager:** Petri Heinimaa ([petri.heinimaa@luke.fi](mailto:petri.heinimaa@luke.fi))

**Date of reporting:** May 2015

**Introduction**

Understanding interactions among fish, fisheries, and cormorants is in the perspective of different stakeholders. A pan-European management plan has been set on the advisory list of EIFAAC. Currently only national, regional and local management actions have appeared but a pan-European dimension has been unreachable. The amount of cormorants is leveling up as a total but there are different trends in the amounts of breeding pairs in different countries. Conflicts occur in most of the European countries despite of the directions of the development of the breeding population.

The work of the project, which has been acting as a liaison group, after the 26<sup>th</sup> Session has concentrated on following and participating in the discussions and meetings on cormorant issues in different countries and especially in the Baltic Sea countries.

The most important participation has been the EU Commission funded project on “Sustainable management of cormorant populations” from 2011 until spring 2014, which had a stakeholder liaison group in which also EIFAAC was represented by the project. The EU-project has a website to distribute information on different cormorant issues:

([http://ec.europa.eu/environment/nature/cormorants/home\\_en.htm](http://ec.europa.eu/environment/nature/cormorants/home_en.htm)).

The project carried out cormorant breeding colony counts in summer 2012 (report is available in electronic format at <http://dce2.au.dk/pub/TR22.pdf>) and the winter counts in 2013-2014 (report has not been published yet).

**Terms of Reference**

TOR was approved at 27<sup>th</sup> Session of EIFAAC in Hämeenlinna, Finland, in 2012.

- Work for the pan-European cormorant management actions.
- Collect from different sources information on the abundance and distribution of the cormorants in the member countries.

- Assess the interaction between cormorants and different stakeholders.
- Assess cormorant's influence on socio-economic conditions of fisheries and aquaculture.
- Gather information of the new developments and experiences in controlling the number of cormorants and their influence on fish stocks, fisheries and aquaculture.
- Identify possible knowledge deficits for different geographical regions.
- Disseminate information through national focal points, project participants, project web-site and publications.

**Benchmarks/deliverables**

1. Update of national situation with cormorants and experiences on management plans in member countries.
  - The information on the present situation in member states has been presented by the Cormorant project in connection with the cormorant breeding colony count report.
  - Updated information on Cormorant issues are available on the websites of the Cormorant-project, EAA, Helcom, Wetland International and national research institutes.
  - Development of project website is still underway due to the organizational changes in the project's chair's home institute (the Finnish Game and Fisheries Research Institute merged together with three other institutes to form the Natural Resources Institute Finland).
  - Discussions on the Baltic situation and management action experiences have been carried out with Danish colleagues.
2. Develop elements for management actions and relevant suggestions.
  - A workshop to develop the elements for the management actions has been planned but search for the financing for the event has not been successful. Chair participated and gave a presentation at a Nordic recreational fisheries workshop spring 2014 in Helsinki Finland.
3. Advise TSC on draft Pan-European Cormorant Action Plan by the 2015 Session.
  - This target has not been achieved.

## PROGRESS REPORT

### EIFAAC Project: Downstream Passage of Fish at Hydropower Dams

**Manager:** Thomas K. Mc Carthy, Ireland

**Date of reporting:** 17<sup>th</sup> May 2015

#### Introduction

Downstream migration of fish at hydropower dams has been identified as key factor affecting the restoration of fish stocks in regulated rivers. It is essential to reduce migration delays, damage and mortality to fish at these migration barriers. At the moment there is a lack of international comprehensive information about the knowledge on the downstream fish passage constructions and fish guidance. The project fills this gap by looking and collecting information from different approaches of the design of downstream migration methods and constructions in different countries. Based on this information project also aims to the development of a set of criteria for the design of downstream migration at hydropower plants. The ultimate aim of the project will be production of an edited publication that presents a summary of available knowledge and which could serve as a "road map" for future

#### Objectives

The three main objectives of this project are to promote:

- Improved knowledge of downstream fish passage at hydropower dams and other anthropogenic obstacles. This can involve consideration of problems experienced by a range of species, including during both migrations of diadromous fish and the local movements of entirely freshwater resident species (potamodromous).
- Improved knowledge of technical solutions to hydropower passage problems: Fish guidance to bypass routes; assisted migration around obstacles; peak migration prediction and turbine shutdown.
- Development of methodology for evaluation of the efficiency of technical solutions (e.g. by telemetry; mark-recapture experiments and direct observations with acoustic cameras).

#### Progress to Date

The first meeting of the group took place on the 8th and 9th of December 2014, in the EDF Lab at Chatou, France. The objectives of the initial meeting were to: introduce the members to one another; to review the group objectives; and to discuss the potential contributions of individual members or sub-groups to the project. Participants attended from 11 European countries. Most participants gave short presentations on their current research and this was then followed by round table discussions on various short and medium term tasks that might be addressed at future meetings. Three specific tasks for sub-groups were proposed:

1. Preparation of a summary of national guidelines and legislation concerning downstream passage of fish at anthropogenic obstacles in Europe and elsewhere. This task will also seek to compile information on the types of fish passage facilities used in different countries.
2. An initial review of screening and bypass technologies, together with an evaluation of the protocols that are currently used to assess the efficiency of these fish protection systems. The task will also involve discussion of potential standardization of methods used for estimation of the effectiveness of these systems.

3. A review of the adverse effects of hydropower passage on fish, including both direct and indirect causes of mortality or morbidity. This task will also involve compilation of information on delayed migration, effects on fish orientation, and increased predation risks. Information on fish friendly turbines and potential modifications to existing turbines will be discussed.

**Benchmarks / Deliverables**

The next meeting of the group is scheduled for 26 June in Groeningen, after the AFS Fish Passage 2015 conference.

Collected and published information provides pros and cons of the established downstream migration projects for future work. The guidelines will provide information for the design of downstream migration schemes in the future. Results are expected to benefit especially migratory fish stocks, but in broad sense the whole fish community. The results help to achieve EU WFD goals of good ecological status or good achievable potential of inland waters.

## PROGRESS REPORT

### EIFAAC Project “ Joint EIFAAC/ICES/GFCM Working Group on Eel (WGEEL)”

**Manager:** Alan Walker, Chair

**Date of reporting:** May 2014

#### Introduction

The EIFAAC Working Group on Eel (WGEEL) has been active since the 1970's and acted as a major focus for collation of eel data and biology through its symposia in the 1980s and 1990s – a task it continues to achieve through its annual reports. A widespread severe decline in recruitment was observed in the early 1980s along with a longer term decline in landings. By 1993, this decline in recruitment, along with the stock-wide reduction in landings, was leading to serious concern and since 1998, the EIFAAC Working Group has operated on a joint basis with ICES, providing scientific advice on stock data and eel management, particularly in relation to the EU Action Plan for the Recovery of Eel (EU 2007: COM(2005) 472). From 2014, the GFCM (General Fisheries Commission for the Mediterranean) is operating on a joint basis with EIFAAC and ICES on European Eel.

#### Terms of Reference

##### WGEEL – Joint EIFAAC/ICES/GFCM Working Group on Eels

2014/2/ACOM19 The **Joint EIFAAC/ICES/GFCM Working Group on Eels (WGEEL)**, chaired by Alan Walker, UK, will meet in Antalya, Turkey, from 24 November to 2 December 2015 to:

- Progress the development of the whole-stock assessment methods using the latest available data
- Assess the latest trends in recruitment, stock and fisheries, including effort, and other anthropogenic factors indicative of the status of the stock;
- Progress an eel stock annex and make recommendations for further work;
- Review developments in the standardization of methods for data collection, analysis and assessment and make recommendations for further work;
- Identify relevant data deficiencies, monitoring needs and research requirements;
- Report on significant new or emerging threats to, or opportunities for, eel conservation and management;
- Address the generic EG ToRs from ACOM.

WGEEL will report by 17 December 2015 (date to be confirmed) for the attention of ACOM, WGRECORDS, SSGEF and FAO, EIFAAC and GFCM.

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**Supporting Information**

<p>Priority</p>	<p>In 2007, the EU published the Regulation establishing measures for the recovery of the eel stock (EC 1100/2007). This introduced new challenges for the Working Group, requiring development of new methodologies for local and regional stock assessments and evaluation of the status of the stock at the international level.</p> <p>The EU Member States provided their first EMP Progress Reports in 2012 and the WGEEL in 2013 used the biomass and mortality stock indicators reported therein to provide the first attempt at a stock-wide assessment based on biomass and mortality reference points. However, the WGEEL meetings in 2013 highlighted the following main issues:</p> <ul style="list-style-type: none"> <li>- lack of quality assessment of the assessment methods and reported stock indicators</li> <li>- incomplete reporting by MS of the required stock indicators to the EU in 2012, and to ICES in 2013</li> <li>- lack of stock indicators of countries that are outside the EU but inside the natural range of the European eel (i.e. north African countries)</li> </ul> <p>The WGEEL is developing plans and pursuing opportunities to address the first issue, through development of a common approach to local and national stock assessment, and for existing and new national methods to be fully documented and peer-reviewed.</p> <p>It is anticipated that the second and third of these issues will be addressed, at least in part if not in full, ahead of the 2015 meeting of the WGEEL, through the second round of EMP Progress Reporting (June 2015) and ongoing efforts by GFCM and member countries to develop new eel data for the Mediterranean region.</p> <p>The EU Commission will require an annual update on the status of the panmictic eel stock in 2015 to set the results of the national EMP Progress Reports within the context of the international stock.</p>
<p>Scientific justification</p>	<p>European eel life history is complex and atypical among aquatic species. The stock is genetically panmictic and data indicate random arrival of adults in the spawning area. The continental eel stock is widely distributed and there are strong local and regional differences in population dynamics and local stock structures. Fisheries on all continental life stages take place throughout the distribution area. Local impacts by fisheries vary from almost nil to heavy overexploitation. Other forms of anthropogenic mortality (e.g. hydropower, pumping stations) also impact on eel and vary in distribution and local relevance.</p> <p>Exploitation that leaves 30% of the virgin spawning-stock biomass is generally considered to be a reasonable target for escapement. The EC Regulation set a limit for silver eel escapement to the sea of at least 40 % of the silver eel biomass relative to the best estimate of escapement that would have existed if no anthropogenic influences had impacted the stock.</p> <p>WGEEL (ICES, 2010a; Annex 5) recommended that Eel Management Plan reporting must provide the following biomass and anthropogenic mortality data:</p> <ul style="list-style-type: none"> <li>- Bpost, the biomass of the escapement in the assessment year;</li> </ul>

- $B_0$ , the biomass of the escapement in the pristine state. Alternatively, one could specify  $B_{lim}$ , the 40% limit of  $B_0$ , as set in the Eel Regulation;
- $B_{best}$ , the estimated potential biomass in the assessment year, assuming no anthropogenic impacts (and without stocking) have occurred and from all potentially available habitats.
- $\sum A$ , the estimation of  $B_{best}$  will require an estimate of  $A$  (anthropogenic mortality (e.g. catch, turbines)) for density-independent cases, and a more complex analysis for density-dependent cases.

Most but not all EU Member States reported quantitative estimates of the required stock indicators to the EU in 2012. The reliability and accuracy of these data have not yet been fully evaluated. Furthermore, the stock indicators of all non-European countries that lay within the natural range of the European eel are lacking.

Resource requirements	Sharepoint; Access to national EMP progress reports for 2015 from EU Member States.
Participants	EIFAAC, ICES and GFCM Working Group Participants, Invited Country Administrations, EU representative, Invited specialists
Secretariat facilities	Support to organize the logistics of the meeting.
Financial	At countries expense
Linkages to advisory committees	ACOM
Linkages to other committees or groups	WGRECORDS, SCICOM, SSGEF
Linkages to other organizations	FAO EIFAAC, GFCM, EU DG-MARE, EU DG-ENV

### Benchmarks/deliverables

There have been no deliverables since the December 2014 progress report, because the working group is not due to meet again until November/December 2015 – see draft ToR above.



## PROGRESS REPORT

### EIFAAC Project “EIFAAC support to Fish Passage 2015 - symposium”

**Manager:** Teppo Vehanen

**Date of reporting:** 18.05. 2015

#### Introduction

The goal of the Fish Passage 2015 –symposium is to share fish passage and river connectivity best practices with international colleagues beyond Europe and to attract worldwide experts. EIFAAC supports the symposium, and participation in the project also supports EIFAAC’s work in the inland fisheries. During the project EIFAAC can build stronger partnerships with stakeholders in the field of fish passage. The objectives for EIFAAC include better networking with stakeholders and international colleagues beyond Europe. The project also strengthens EIFAAC’s position as a source of expert technical and scientific advice to support this sector. EIFAAC can strengthen its relationships with international stakeholders from beyond Europe and to be strongly recognized as relevant partner and as a source of expert advice for the fish passage sector.

#### Terms of Reference

##### Objectives

- Better networking with stakeholders and international colleagues of this field beyond Europe.
- Strengthening EIFAAC’s position as a source of expert technical and scientific advice to support this sector.
- EIFAAC is affecting and participating to the symposium organizing work. Teppo Vehanen is in the Organization group and Claudio Comoglio in the Advisory group representing EIFAAC.

#### Benchmarks/deliverables

The project has increased EIFAAC’s visibility through the symposium marketing and information. EIFAAC’s logo is among the organizers which are organizing and supporting the symposium. Emerging EIFAAC projects have a presentation at the symposium (e.g. EIFAAC Project Proposal on standardization of fishway monitoring) or arrange a meeting during the seminar (EIFAAC project on downstream fish passage at hydropower dams).

The symposium has in total have 531 registered attendees coming from 40 different countries around the world, representing every continent. Among the attendees are world renowned experts, researchers, practitioners, conservationists, engineers, governmental officials, regulators as well as students. Teppo Vehanen will be a moderator during one session representing EIFAAC.

The full program is available online, along with the abstract book. These are the symposium web-site (institutions: <http://fishpassage.umass.edu/?q=content/institutions>), symposium flyers, posters and other marketing material. EIFAAC logo is also present during the symposium in the material delivered to participants.

## PROGRESS REPORT

### EIFAAC Project “Management / Threat of Aquatic Invasive Species in Europe”

**Manager:** Joe Caffrey, Inland Fisheries Ireland

**Date of reporting:** 17<sup>th</sup> May 2015

#### Introduction

In January 2012 a Project Proposal entitled ‘Management / Threat of Aquatic Invasive Species in Europe’ was submitted to the EIFAAC T&S Committee by Joe Caffrey (Inland Fisheries Ireland). The Project was agreed by both the T&S and the Management Committee (MC) and commenced in early 2013.

#### Objectives

The objectives as set out in the agreed Project Proposal were:

- To convene a conference of aquatic invasive species managers, scientists and policy makers from EIFAAC countries and from farther afield to drive the objectives below, by Q2 2013.
- To inform the development of the pending EU Invasive Species Strategy (which may result in the development of a European Directive), by Q2 2013. The conference proceedings will detail the outcomes from detailed workshop sessions and will aim to directly influence the draft Strategy. In addition, an oral presentation of the outcomes from the conference and workshops will be offered to the authors of this document.
- To develop a coordinated approach to forecasting (using best Risk Analysis practice) aquatic invasive species invasions, by Q4 2015.
- To produce an effective deterrent to the advance of aquatic invasive species. This will involve harmonising alert, rapid reaction, control and management, and mitigation programmes that currently exist in member countries, by Q4 2015.
- To develop and coordinate international biosecurity protocols and approaches within Europe, by Q4 2015.

#### Progress to Date

Following the Freshwater Invasives – Networking for Strategy (FINS) Conference that was held in Galway, Ireland in April 2013, it was agreed that two documents that focused on the primary outcomes from the event would be prepared. The scientific paper, entitled ‘Tackling Invasive Alien Species in Europe: the Top 20 Issues’, was published in *Management of Biological Invasions* Volume 5, Issue 1: 1 – 20 in April 2014 (doi: <http://dx.doi.org/10.3391/mbi.2014.5.1.01>). A technical publication as part of the EIFAAC Occasional Paper series will be published in June 2015 and is entitled ‘Aquatic invasive alien species – top issues for management. Outcomes from the Freshwater Invasives – Networking for Strategy (FINS) Conference’, Galway, Ireland 9 - 11 April 2013. The assistance of Gerd Marmulla in bringing this document to final publication is gratefully appreciated.

Copies of the scientific paper from the FINS Conference were sent to the Rapporteur for the EU Regulation on Invasive Alien Species and to scientists and policy makers known to be involved in the development of the Regulation. Representatives from the authorship of the paper offered to meet with EU representatives to discuss the contents of the Regulation before it was eventually published but such a meeting was not deemed necessary.

The Chairman of the Project and some members of the EIFAAC Invasive Species Advisory Group that was formed following the FINS Conference have been actively involved in major international risk

assessment programmes. Joe Caffrey headed up the Invasive Species Risk Assessment (ISRA) programme in Ireland, which undertook risk assessments of 42 species that were included in Ireland's *European Communities (Birds and Natural Habitats) Regulations 2011 (Statutory Instrument 477/2011)*. The risk assessment template used was based on the Non-native species Application based Risk Analysis (NAPRA) tool. The Chairman and other members of the Group (principally Frances Lucy from Institute of Technology, Sligo) have been closely involved with the European COST programme. This involvement with both national and international risk assessment projects will further the objective of developing a coordinated approach to forecasting aquatic invasive species invasions.

EIFAAC's continued involvement with the development and implementation of the new EU Regulation on IAS will be important to progress Objective 4 (harmonising alert, rapid reaction, control and management, and mitigation programmes in EIFAAC countries). The EU is currently engaged in consultation regarding the composition of the list of species to be included in the 'Invasive alien species of Union concern' and a number of the EIFAAC Invasive Species Advisory Group members are involved in this process at national level.

In relation to biosecurity protocols and procedures (Objective 5), the members of the EIFAAC Invasive Species Advisory Group (and particularly the Chairman) have been actively involved in developing appropriate protocols and methods for use by agencies and key stakeholder groups. They are also in contact with NIWA (New Zealand) with regard to new biosecurity technologies for use in and near watercourses. Good progress continues to be made in this area.

A decision was made following the FINS Conference in Galway to convene an EIFAAC-led FINS II event. Marina Piria (TSC) is the Chair of the Organising Committee. It is suggested that the event will be held in Zagreb, Croatia in July 2016.

#### **Benchmarks / Deliverables**

The 'expected deliverables' presented in the Project Proposal were as follows:

1. Plan and deliver an international conference on aquatic invasive species that will bring together leading experts from Europe and farther afield.
2. Establish a committee of experts to coordinate the conference and ensure that all relevant delegates are invited to attend.
3. At the conference workshops, led by leading world experts, key themes relating to the threats and management of aquatic invasive species will be discussed.
4. A document that includes the speakers addresses to the conference and the outcome from the two days of workshops will issue in Q3 2013 and it is anticipated that this will inform policy development on invasive species in Europe.
5. An expert group will be established following the conference, with significant input from EIFAAC countries, and will help steer the harmonisation of invasive species policy through Europe.

Items 1 to 5 in the above list have more or less been achieved to date.

Joe Caffrey  
Chair Aquatic Invasive Species Group

17<sup>th</sup> May 2015

## PROGRESS REPORT

### EIFAAC Project “Fish Passage Best Practices” (EIFAAC Project on “Development of Guidelines on the design of nature-like passes)

**Manager:** Andreas Zitek  
**Date of reporting:** 8.6.2015

#### Introduction

From within the broad field of “Fish Passage Best Practices“ that was originally covered by the “EIFAC *Ad hoc* Working Party on Fish Passage Best Practices”, a specific issue was singled out to be addressed by a project<sup>1</sup>. This project is aiming at the development of a set of criteria for the design of natural fish passes for upstream migration and finding a commonly agreed definition for natural fish passes. There is a need for the project to look at different approaches to the design of natural fish passes in different countries as the design criteria used in different countries are much more heterogenic than that for “technical passes”. Future projects may include also technical types of fish passes. The ultimate purpose of the project is to produce a guideline for the design of nature-like fish passes to restore connectivity for the benefit of biodiversity and fishery. There is also the idea to include a short paragraph on monitoring.

#### Terms of Reference

- Redefine the meaning of “nature-like fish passes”
- Define design criteria for different types of natural fish passes in relation to fish species and river zones

Produce Best Practice Guidelines (i.e. a publication) on upstream fish passage via natural fish passes, disseminating most relevant information otherwise not available

#### Benchmarks/deliverables

- First Draft 20.10.2011
- Meeting at Ecohydraulics 17.-21. September 2012 Vienna
- Second draft December 2012
- 10.09.2013 – first draft on pool-riffle structures delivered by Rolf Gebler
- 31.12.2013 Final draft- not delivered
- 31.03.2014 Final draft will be distributed to Michel Larinier, Rolf Gebler and Gerd Marmulla for review. In addition, the content and English of the text will be reviewed by Greg Armstrong.
- Due to heavy workload the distribution of the draft was again delayed, but is in production and will be distributed after the Christmas holidays.

**General:** 8.6.2015: The manager of the project is “finalizing the draft, and it will be sent out soon”.

## PROGRESS REPORT

### EIFAAC Project “EIFAAC Symposium on Recreational Fishing in Inland Waters”

**Managers:** Øystein Aas and Arne Eggereide

**Date of reporting:** 7 May 2015

#### Introduction

EIFAAC has proposed that a symposium on recreational fishing in inland waters should be held in 2015. Norway has accepted to host the symposium, which will be succeeded by the biannual Plenary Session of EIFAAC. The title of the symposium is *EIFAAC International Symposium on Recreational Fishing in an era of change*.

Phase 1 of the project was completed in the autumn 2013, and it was recommended that the planning of the symposium should proceed in a phase 2. Phase 2 is ended with completion of the Symposium - everything is per primo May on schedule for the Symposium to be held in medio June 2015.

#### Terms of Reference

##### Objectives

- Facilitate an EIFAAC Symposium in 2015 on Recreational Fishing.
- Establish formal EIFAAC links with stakeholders in the European inland recreational fishing sector
- Place EIFAAC as the source of expert technical and scientific advice to support this sector

The project managers have proposed that the following potential outcome from the symposium should be delivered by EIFAAC’s Management Committee:

- EIFAAC network
- Agreements with NASCO and AFS
- Agreements with stakeholders

#### Benchmarks/deliverables

Key achievements and milestones that have been completed during winter and spring 2015 include:

- Feedback to and discussions with keynote speakers, session chairs and speakers. Confirmations back to the same persons.
- The topical program (final program attached)
- Complete plans for the social program
- Announcement of Symposium and receiving of registrations
- Complete budget for the Symposium
- Negotiations and complete contract with the Symposium Hotel

Overall, the Symposium will have around 100 talks. Monday before lunch and Wednesday before lunch will be plenary sessions, while Monday after lunch and all of Tuesday are organized in four parallel technical sessions (see program). Registrations (still a few are coming) indicate the total number of participants to be around 200, from around 25 countries. Approximately 5 – 7 companies have registered for the fairground.

**Benchmarks/deliverables**

Remaining deliverables to be completed include:

- Finalise the Program book and abstracts
- Finalize and distribute practical tasks among the staff for the Symposium
- Sending out a final email with key travel information to all participants
- Carry through the Symposium
- Clarify plans for EIFAAC advice and report from the Symposium

## PROGRESS REPORT

### EIFAAC Project “Welfare of fishes in Aquaculture”

**Manager:** Teppo Vehanden

**Date of reporting:** 03.06.2015

#### Introduction

Welfare in fish culture is of increasing public concern and of increasing importance. To discuss a controversial issue like welfare of farmed fish, it is important to have an independent institution to discuss, prepare and publish an independent state of the art concerning welfare of fishes in aquaculture. Therefore, EIFAAC as the reference institution of competence in the field of inland fisheries and aquaculture decided to initiate a project on this topic.

#### Terms of Reference

The project started in 2014 and is scheduled to finalize in 2017. It is linked to Strategic Objective II: “Interactions and avoidance or resolution of conflicts in inland fisheries and aquaculture”. The project is managed by Teppo Vehanen. Helmut Segner serves as coordinator of the proposed project. This includes coordination of the contributions of the participants of the working group, organisation of a workshop and the preparation of a final “statement” concerning welfare of fishes in aquaculture. Helmut Segner serves as coordinator of the proposed project, including the coordination of the contributions of the participants, organisation of a workshop and the preparation of coordination of the final report. Members of the working group are experts in the field of welfare of fishes.

The outcome of the project will include (a) a report on the actual knowledge concerning welfare of fishes in aquaculture, and (b) an EIFAAC statement including recommendations concerning welfare of fishes in inland aquaculture.

#### Project objectives

The objective is to produce a summary of the actual knowledge concerning welfare of fishes in aquaculture and based on this knowledge to prepare a clear and concise statement by 2017.

The aim of the project is not another scientific review paper on fish welfare, but to derive from the existing knowledge recommendations on how to assess and support fish welfare in practical aquaculture.

#### Progress to date

2014: An *ad-hoc* working group has been formed. The task of this group is to collect and summarize the state of knowledge concerning welfare of fish in aquaculture. This forms the basis for the writing of the report and the derivation of recommendations for practical fish culture. By a series of telephone conferences, a common understanding of the project aims and deliverables was achieved.

First quarter of 2015: A drafting group prepared an outline of the possible structure of the report. This draft outline was distributed to all members of the working group and discussed in a telephone conference in April 2015.

May 2015: A workshop was held at Langenargen, Lake Constance, Germany, to further discuss and refine the draft outline of the report and to confirm or modify the project objectives and the contents of the draft outline. The workshop successfully achieved these aims. Tasks on further refining individual chapters of the draft outline were distributed among the workshop participants.

### **Benchmarks/deliverables**

The next steps in the project will be:

October 2015: The document from the Langenargen workshop will be developed into a more elaborated version until October 2015. Afterwards this version will be distributed for commenting to all project members.

October 2015 – spring 2016: Based on the feedback and comments of the previous step, a refined version of the report will be prepared.

June 2016: The draft report will be distributed to stakeholders (fish farmers, authorities, professional societies, etc.) for commenting. If necessary, a discussion meeting will be organized.

October 2016: A drafting group will prepare the EIFAAC statement including recommendations concerning welfare of fishes in inland aquaculture. The draft statement will be available end of 2016.

Early 2017: A refined version of the report will be available and will be sent, together with the draft EIFAAC statement to all group members, fish farmers, authorities etc. for commenting.

September 2017: Workshop to integrate the feedback and comments into the report/statement. A group will start to prepare

End 2017: Report and statement will be ready for submission to EIFAAC.