



EXTERNAL EXPERT ADVISORY BOARD (EEAB) REPORT –
FIThydro SC & CSMB KICK-OFF MEETINGS, VIENNA, 3-5 APRIL 2017

1. Introduction

The FIThydro Steering Committee (SC) meeting on Monday, April 3, 2017 was followed by the kick-off workshop of the Case Studies Management Board (CSMB) on Tuesday and Wednesday, April 4th & 5th. A field visit to the Freudenua hydroelectric station and nature-like fishway took place on Wednesday afternoon. The field trip and meetings were hosted by partner VERBUND Hydro Power GmbH at the Europaplatz office in Vienna. These meetings were held earlier than originally planned to expedite the process of data gathering, and site selection as recommended by the EEAB in the first report, following the inaugural FIThydro kick-off meeting, held at TUM Raitenhaslach, 21-23 November 2016.

2. Steering Committee

The Steering Committee updates on each WP (Work Package) on Monday, were informative, showed good progress, and better understanding of the dependencies between WPs, compared to the inaugural FIThydro kick-off meeting. Presentations, generally reflected EEAB recommendations from the inaugural meeting, with more emphasis on integration within and between regions, adopting more Pan-European approaches where feasible, as well as considering how connections will be made between WPs, and how learning opportunities can be maximized. The one exception was WP2, where some continued concern about limited progress was expressed, even though a survey was circulated to be completed by partner companies. Lack of responses by partners, may be associated with less than vigorous follow-up by the WP2 Leader (Laurent David), issues of task clarity, or reluctance by some partners to share information and data. The need for more intensive efforts to achieve the WP2 objectives, assist partners overcome any reservations they may have, and further support its Leader in gathering and sharing data and information from partner companies, was identified. The FIThydro Coordinator (Peter Rutschmann) offered additional support to the WP2 Leader for further interaction with partners. It is crucial to the overall FIThydro project that this be followed-up with both the WP2 Leader and any partners who may be reluctant to share information, and firm decisions be made to overcome any difficulties.

EEAB continues to be concerned with the lack of responses by some partners and the rather weak management of WP2. The EEAB recommends that additional support be provided to the WP2 Leader from the Coordinator, perhaps through

Kordula Schwarzwälder, and that interaction among WPs may more efficiently be conducted through direct contact with the WP2 subtask leaders.

As part of the coordinator's continuous efforts to accelerate the initial phase of the FIThydro project in order to clarify the still open issues and to reach the productive phase, we have conducted the following:

1. Consultation with WP leaders 2, 3, 4 to discuss the best solution forward to improve the efficiency of WP2's coordination and enhance the communication process with all partners with respect to WP2
2. Kordula Schwarzwälder and Peter Rutschmann had a meeting with Laurent David in Paris on the 17th of May in order to discuss how to achieve a better management of WP2 and to help with instant working power from the coordinator to reach a comparable status to WP3 and WP4. This also includes a better communication strategy within WP2.
3. We organized a two-day meeting of WP2, WP3 and WP4 in Lisbon, June 12-13. The main goal of the meeting is the better coordination of mainly WPs 2 to 4 and to interlink the WPs with the Test Cases.
4. The following actions have been taken:
 - a. We have decided to restructure WP2 into 5 smaller management units as shown in the following table:

Subtask	Main Content	Lead Partner (Co-Lead)
2.1.1 & 2.2.1	Flow and Habitat	IST (NTNU)
2.1.2 & 2.2.2	Migration	ETH (CNRS)
2.1.3 & 2.2.3	Turbine Passage	TUM
2.1.4	Identification of knowledge gaps	CNRS
2.3.1 & 2.3.2	Prospects for improved and innovative SMTDs	CNRS

- i. We agreed with Antonio Pinheiro to support Laurent David in the management of subtasks 2.1.1 and 2.2.1. We would transfer 4 Personnel months to Antonio Pinheiro (from CNRS's budget) for the management of subtasks 2.1.1 and 2.2.1
 - ii. We agreed with Robert Boes to support Laurent in the management of subtasks 2.1.2 and 2.2.2. This would be achieved with the already personnel months allocated to ETH + in-kind contribution from the ETH side.
 - b. The role of the newly created lead partner would be to perform the following duties:
 - i. Manage their subtask in terms of timeline, reporting and collaboration / overlap of work
 - ii. Manage the scientific content as the results of same kind of work at different test cases need to be as comparable as possible
 - iii. Report to CNRS, who will report further to the Steering committee

- iv. Present their Subtask, its content and results at the GA and other meetings
- c. In June-July 2017, Laurent David, Antonio Pinheiro and Robert Boes (Ismail Albayrak) will carry out the following tasks:
 - i. Study the detailed description for respective subtasks
 - ii. Familiarize themselves with the assigned subtasks
 - iii. Discuss in detail the status for each subtask/partner for each subtask
 - iv. Discuss how to inform the partners of the new structure
 - v. Operational plan to meet the “job description” of the co-leads (who does what)
 - vi. Deliverable plan discussion
 - vii. Report on status to the coordinator (Deadline: 30th of June)

Note: The overall management of the WP2 is still a responsibility of Laurent David while using the assistance of the newly created structure and co-lead partners. Coordinator would perform another evaluation after a 6-month period and check afterwards whether WP2 has succeeded to be on track with the other WP's. If this was not the case, more actions would be explored by the Steering committee

The Coordinator has established contact with the Coordinator of the AMBER project and will continue mutually beneficial exchanges. The Coordinator's recommendation to add Dr. Robert Fenz to the EEAB was accepted. Financial support for all EEAB members to attend the annual FITHydro meeting was confirmed. For in-between meetings, there will be financial support from the Coordinator's budget for one EEAB member to attend in person, and the choice was left up to the meeting organizers, who may consider expertise needed and availability. There may be opportunities for other EEAB members to participate by teleconferencing. Furthermore, e-mail requests for advice may be addressed to EEAB members. The EEAB supports these efforts.

3. Case Studies

The presentations at the CSMB kick-off on Tuesday provided additional information and clarified issues further, particularly from the view point of the operators. While some operators were quite transparent about their needs, others seemed reluctant to provide information and data without further clarification (see 2 above). In addition, it seems that limited evaluations and very few rigorous scientific studies have been conducted on the effectiveness of mitigation measures implemented at test site HPPs (hydroelectric power projects). Although ably handled by Chair Atle Harby, concern with lack of progress led to more direct questions by the end of the day. Leaders and EEAB members developed a strategy to separate participants in three smaller groups, and have workshop style discussions on Wednesday morning, by asking each group to answer the same questions. On Wednesday, this format provided renewed momentum, succeeded in overcoming stalled discussions, and brought more transparency and clarity of purpose, although more effort is still required for WP2. Discussions on Tuesday and Wednesday, expanded on more specific ideas to improve communication, keep track of progress in

each task, and more clearly identify maximum benefits from synergistic actions.

The EEAB recommends that CSMB and WP Leaders establish internal reporting with commitments and deadlines to be updated bimonthly. Items for this reporting, should include: 1) Scientific progress; 2) Innovation; 3) Synergies between WP tasks; 4) Solutions to implementation difficulties; 5) Dissemination. Such reporting should highlight those areas (or partners) where problems persist and deal with them appropriately.

Action: The Steering Committee of FIThydro discussed internal reporting and agreed with the EEAB on the need for bimonthly reporting. We are currently finalising the following:

1. The Coordinator would provide a method of reporting (an online link/form) that collects all the reporting schemes that are filled by all partners and exports into Excel
2. All partners should fill in a scheme where they describe their scientific progress related to each of the sub-tasks they are involved in in WP's and linked to the actual Test Case(s) this concerns (when the work also relates to a Test Case). All partners send these schemes to the Coordinator. The Coordinator is responsible to take actions if a partner does not send their scheme or not being responsive
3. The coordinator distributes compiled reports to each WP leader according to their respective WP.
4. The WP leaders should monitor the content and the completion of these schemes by all partners and communicate with the partner directly...
5. The WP leader is responsible to analyse all reporting concerning her/his WP, and take actions directly with the partner(s) if the progress is not satisfactory or if there are issues reported that need to be investigated.
6. The report will contain information about expected tasks to be carried out, deliverables, milestones and due times for each partner at sub-task level as guidance for the reporting. Each second month, the status with respect to this is reported with focus on:
 - 1) Brief scientific progress and status of deliverables (to be filled by each partner)
 - 2) If there are any new or upcoming innovations (to be filled by each partner and checked by WP leader)
 - 3) If there are any deviation from plans, deliverables or timeline (to be filled by each partner for their activities and by the WP leader for the whole WP)
 - 4) Synergies between WP tasks (to be analysed and identified by WP leaders)
 - 5) Dissemination activities for target groups (To be filled by each partner), such as
 - a. Research and academia
 - b. Authorities (local, national and EU authorities)
 - c. Industry (hydropower companies, equipment manufacturers, consultants)
 - d. The public (stakeholders*, NGO's, the wider public)
 - 6) Summary of economy items (Person Months, Costs and Subcontractors)

This internal reporting scheme would feed into the reporting that should be done by all WP leaders and the CSMB leader as per the consortium agreement:

“6.5.5 The CSMB will report on the regular progress of all work concerning the test cases every 6 months to the Coordinator and to the Steering Committee. Reports will only be forwarded by means of an unanimous decision.

6.3.2.3.5 In addition, the Steering Committee shall collect information at least every 6 months on the progress of the Project, examine that information to assess the compliance of the Project with the Consortium Plan and, if necessary, propose modifications of the Consortium Plan to the General Assembly.”

The above recommendation is a more tangible way to facilitate better communication on interdependent tasks between WPs and ensure improved tracking of progress, particularly synergistic activities. This is in line with a parallel recommendation in the first report of the EEAB.

Furthermore, following the presentation of the FiTHydro project to the Water Framework Directive working group ECOSTAT, the EEAB once again recommends:

- 1) That the test cases be framed in the context of the current EU legislation, which includes the water body type, if natural or heavily modified, if relevant mitigation measures are already envisaged in the River Basin Management Plan Program of Measures or if/how they will be included, if conservation objectives stemming from the Habitat Directive are to be achieved in the HPP area, etc.

Action: The regional test case leaders and the CSMB leader will ensure that the information from the River Basin Management Plans, Programme of Measures and any conservation objectives stemming from the Habitat Directive for all Test Cases will be collected and analysed. This must apply to the relevant water bodies for the actual hydropower plant(s) and affected fish populations and river reaches/sections/basins.

The CSMB leader will develop a new scheme for reporting information and data from Test Cases and circulate to Regional Test Case leaders to populate with data, either collected themselves or by investigating with the Test Case operator. This new scheme will include necessary information as listed above.

- 2) that the scales of the aquatic system impacted by each HPP (i.e. upstream and downstream reaches) are identified consistently, along with the relevant ecosystem limiting factors (i.e. fish populations, sediment load, water quality, etc.).

Action: Following the work related to the previous recommendation from the EEAB, information about the relevant spatial scale for each Test Case will be identified. The CSMB and regional Test Case leaders, would like to consult the design of the enhanced reporting scheme (see above) with EEAB.

- 3) that all project partners frame or report their work in the same, WFD/HD compliant way from the outset, regardless of what country they operate in, to ensure comparable outputs.

Comment: The CSMB would like to ask EEAB for further clarification on the exact implications of this, and would appreciate further comments and clarification on:

- if this applies to all kind of reporting, i.e. both internal reporting within FiTHydro (progress reports, reports to WP leaders, CSMB, General

Assembly, etc) and external reporting (scientific articles, technical reports, policy briefs, conference and seminar presentations, internet and social media reporting and reporting for the wider public)

- what exactly "WFD/HB compliant" means. Clarifications and examples would be much appreciated

EEAB will provide support to the CSMB in these areas, if needed.

External Expert Advisory Board (EEAB) members

Christos Katopodis, P.Eng., FCSCÉ (attended 3-5 April)

Dr. Martina Bussettini (attended 3-4 April & ECOSTAT 5 April) Dr. Robert Fenz (attended 5 April)

Prof Colin Bean (was unable to attend)