

Annual Report of a SETAC Europe Advisory Group (AG)

Name AG:

Effects of extreme stress events on ecosystems (Excess)

Steering Committee:

Frederik De Laender (UGent, Belgium, chair) , Lucia Guilhermino (University of Porto, Portugal, co-chair), Francesco Pomati (Eawag, Switzerland), Thomas G. Preuss (RWTH, Germany), Anne Alix (AFSSA, France), Peter Goethals (UGent, Belgium), Tido Strauss (RWTH, Germany), Chris Klok (Alterra, the Netherlands), Mathijs Smit (Statoil Research Centre, Norway), Malyka Galay-Burgos (Ecetoc, EU), Almut Gerhardt (LimCo, Germany), Sabine Duquesne (UFZ, Germany), Matthias Liess (UFZ, Germany), Mark Kirby (Emergency Response & Offshore Industries Programme Leader, Cefas Lowestoft Laboratory, UK), Dick De Zwart (RIVM, the Netherlands).

Science Committee Liaison:

Lucia Guilhermino (co-chair).

Mission statement:

The long term objective of this AG is to promote research on ecosystem impacts of chemical spills and subsequent recovery. Its first short term objective is to assemble expertise on all related aspects, going from monitoring to predictive modeling and to synthesize this expertise in a publication.

Summary of activities:

1. Meeting at SETAC Berlin

Meeting report Excess AG

Date: Tuesday 22/5 17-18h

Present: Frederik De Laender, Lucia Guilhermino, Ludiwine Clouzot, Thomas Preuss, Tido Strauss, Sabine Duquesne, Bjorn Einar Grosvik, Alessio Ippolito, Almut Gerhardt, Francesco Pomati, Lisette De Hoop, Karel Viaene, Jonas Juselius

1. The meeting starts by a brief overview of the scope, mission and goals as they are listed in the last revised Excess proposal.
2. Now that the AG is in place, how can the ideas be put into practice?
The following action points are discussed:
 - The AG has to increase its visibility. This should be done by sending around notifications globally (will be taken care of by Frederik) and submitting session proposals for SETAC Glasgow.
 - Our activities and achievements should be reported frequently to SETAC.
 - We should make an inventory of available data on the exposure, impact and recovery following a spill. This can be done by writing

a review that contrasts the data needs for proper impact assessment of a spill and data availability. Ideally, a workshop is organized during which such a paper is written. However, for now, the group finds it too early to organize such a workshop. Instead, it is suggested to organize a teleconference during which an appropriate outline is developed. September is a realistic period to organize this teleconference. Towards the end of the year, we aim to finish a first draft, after which we will polish the structure of the paper during a second teleconference. If funding can be found, a workshop may be organized to review and finalize the paper. Frederik will in the meantime check if chemical industry is interested in joining in such an effort.

- It is suggested that – in the review paper discussed in the previous point - we need to categorize a number of case studies according to spill size, location or habitat and stressor type. A number of potential case studies are mentioned that could be dealt with (e.g. deepwater horizon, Sandoz 1986, multiple smaller accidents with PPPs in rivers and streams accidents). During our writing effort, it is important to consider the availability of baseline data against which data from the exposed ecosystems can be compared. Also information on the recovery of those systems may be included. Thomas and colleagues are at the moment writing a review on population recovery, which may yield useful insights to be referred to while writing the Excess review.
- The structure of the review Excess aims for may include the following issues:
 - What has been measured and what do stakeholders want to assess impact and recovery?
 - Make this comparison between needs and availability for several spill types: Do needs and availability correspond better for certain spill types (PPP vs. oil) or certain environments (freshwater vs. marine)?
 - What is the procedure in case an accident happens? Ask our national institutes.
- Collaboration within Excess: It is concluded that Mendeley (<http://www.mendeley.com/>) is a useful platform for communication and collaboration within Excess. Frederik will invite all SC members to join Mendeley and afterwards invite them to join a group he will create for Excess. In addition, Frederik will ask Roel Evens (SETAC) what type of platform is available within SETAC to communicate and disseminate on our findings.

2. Session at SETAC Berlin

A session on oil spills was chaired by Matthijs Smit and Frederik De Laender. Attendance was moderate but the presentations were of a high level. A report of this session was sent by Matthijs, who acted as the main chair.

3. Manuscript preparation

As decided at the first meeting in Berlin, the preparation of a manuscript was initiated in summer 2012. On September 27 2012, a Skype call was organized with a subset of the interested parties to discuss the outline of the paper, prepared by FDL. Others gave input via email. On October 10 2012, the outline of the paper was revised by FDL based on the feedback received and all authors were asked to indicate where they wanted to contribute. By November 14 2012, most authors replied where and how they wanted to contribute. On January 8 2013, all authors were invited to insert their contribution. The resulting draft will be discussed at the SETAC Glasgow meeting.

The author list as it stands now is: Frederik De Laender, Peter Goethals, Chris Klok and Lucia Guilhermino.

Others that have shown interest to participate in a later phase are Almut Gerhardt, Mathijs Smit, Malyka Galay Burgos.

4. Session proposal at SETAC Glasgow

For the upcoming SETAC EU meeting in Glasgow, Mathijs Smit and FDL proposed a session which was accepted as a poster session.

5. Equilibration of the steering committee

During the last year, both the chair and co-chair have invested considerable effort in contacting potential candidates from industry and government to equilibrate the steering committee, which is now dominated by academia. These efforts have resulted in two government members: Dick De Zwart (RIVM, The Netherlands) and Mark Kirby (Emergency Response & Offshore Industries Programme Leader, Cefas Lowestoft Laboratory, UK). At the moment, FDL is communicating with oil industry affiliates to join the SC.

6. Future plans

a. Membership issue

As of now, the membership number of the AG is an issue of concern. The SC has presented posters of the AG at SETAC Long Beach and SETAC Berlin and announced the existence of the AG during platform sessions at SETAC Berlin to address this problem but with very little result. Also, a Globe article was dedicated to the AG to raise new members. In the next year, the SC will take up this challenge and think about alternative approaches to raise awareness.