

Annex IV Meeting Country Analysts

January 2018

January 29 th 1500 GMT Meeting Attendees:	January 24 th 0000 GMT Meeting Attendees:
Jan Sundberg (Sweden)*	Daisuke Kitazawa (Japan)*
Olivia Langhamer (Sweden)	Ou Ling (China)*
Teresa Simas (Portugal)*	Lars Golmen (Norway)*
Juan Bald (Spain)*	Andrea Copping (US – PNNL)*
Anne Marie O’Hagan (Ireland)*	Jonathan Whiting (US – PNNL)
Melissa Oldreive (Canada)	
Candace Nachman (US – NOAA)	
Samantha Eaves (US – DOE)	
Andrea Copping (US – PNNL)*	
Jonathan Whiting (US – PNNL)	
Mikaela Freeman (US – PNNL)	

*Country analysts

The regular bimonthly meeting of the Annex IV analysts focused on updates on:

- Annex IV activities including the OES position paper, November OES meeting, Interview for OES annual report, use of OES funds in 2017 and 2018 OES budget; discussing moving the Regulator Survey to other countries; progress and work plan for data transferability;
- Discussing Annex IV Ambassadors; and
- Highlighting upcoming conferences and Annex IV workshops.

The first meeting on January 24th was held to engage the Asian and Oceania representatives, while the second meeting on January 29th engaged the European, North American and African representatives. The US representative was on both calls.

Andrea presented slides (attached) on the following topics:

- Annex IV activities
- Regulator Survey
- Data Transferability
- Annex IV Ambassadors
- EIMR, ICOE Workshops, AWTEC
- *Tethys* Stories + Metadata

Annex IV Activities

Lars – arranging 3 day workshop in Norway associated with the ICES MRE working group, April 16-18. Finlay Bennett (Marine Scotland Science) is leading the workshop. Could there be some joint event between Annex IV and ICES?

Andrea – Let’s look at that, really good idea. Annex IV could certainly be a collaborator. Please send me information on the workshop.

Theresa – Both Juan and I are involved in the ICES workshop as well. Lars offered to join conference on wild birds with our working group meeting, but since then don’t have any more information on it. I believe he will start thinking about it maybe within the next month. I will speak to Lars and we can send some information out.

Daisuke – AWTEC is in September, we aren’t planning a workshop but we can collect information from the conference regarding development in Asia.

Andrea – Zhaoqing Yang (PNNL) and I are planning a session during AWTEC and we can also hand out materials and raise awareness for Annex IV activities.

Teresa – about workshop at EIMR, didn’t you already host a socio-economic workshop at EWTEC? Perhaps this was one of the conclusions that we need more meetings and more discussion is that why we have another here at EIMR.

Andrea – Yes, at the EWTEC workshop (report on workshop coming soon) there was a strong sense we needed to separate social and economic –professionals on the social side say it often gets buried in economics. Wanted to address challenges with getting data and using data for consenting purpose. Good discussion about the challenges identifying risks and benefits for social and economics around MRE developments. Some challenges include the difference in scales when collecting data. Outcome from workshop was that we still needed to look at the practical outcomes of using this data. At EIMR we will do this by using case studies where consenting has been done that show how the data were collected, used, and the outcomes.

Olivia – what case studies?

Andrea –US West Coast testing site, Orkney, FORCE, and Nagasaki. If you have one out of Sweden that would be great.

Regulator Survey

Daisuke – First have to translate the survey. I think I can collect a few responses from local government regulators.

Andrea – The important thing is to get a list of people and their email addresses.

Ling – I think this activity is very good and will try to do this in China and connect different departments in different cities and provinces, but will be difficult. Not sure how many people we can locate/will partake, but willing to try.

Lars – I think ICES did a similar exercise in ICES countries in their group, so maybe we can build on that. I did this for Norway and it was done by the ministry.

Andrea – We can provide the survey questions, any information and can help you.

Juan – think this is possible in Spain. We have strong contact with the main stakeholders in the administration so think we can do.

Melissa – I think that would be interesting in Canada. There is so much provincial level guidance and the federal government is looking at how they might regulate MRE, so would be very interesting to proceed with survey here. Is your thought I or Anna would lead this effort with support from you? Who would collect the data and analyze it?

Andrea – it should be led by Annex IV country analysts (you!), who will have to provide the contacts and determine whether the questions are appropriate for your country or need to be changed; they may also need to be translated. We can provide support by giving you the survey and can run SurveyMonkey, which will give the basic analysis on the data. We would want your help with interpretation of the data. Shouldn't be a difficult task for analysis. At some point would like to bring all the data/information together for all the countries.

Melissa – I might raise our hand here for Canada and look it over.

Andrea – great let's connect about that after. Should we do this country by country in Europe or together?

Anne Marie – no, it needs to be country by country

Juan – I agree

Andrea – we will get the information organized, so look for something in the next week or so with questions, etc.

Data Transferability

Juan – I haven't had time to review the white paper can you give us one week or so?

Andrea – We received feedback and it is my intent to do make some small clarifying changes. I will get a new version out to you in a week. Please send feedback in two weeks.

Teresa – have some thoughts/comments on data transferability, related to nomenclature. When you speak about data, you are talking about specific data for a specific site? From the Portuguese perspective we think about methodologies that can be applied to other places, so I'm not sure if I am understanding well what is "data transferability". To me, data are specific to a site and how you compare the methods you have used is possibly what you want to understand, regarding results at each site. Maybe I need to read the report until the end, didn't have much time but I will read it all the way through because I think it is an interesting subject.

Andrea – "Data transferability" may not be the right words. Whenever you put a device in the water you do need data that is specific to the site. What might be more transferable (call it "information" or "knowledge"), is the mechanics of what is likely to be going on when an animal gets close to a turbine blade, for example. This is common across waters, so if it's the same animal we should be able to learn something from watching fish around turbines in the US, Canada, UK. Underwater noise is another such issue: getting a sense of sound levels/frequencies coming from WECs or turbines and how they relate to

levels that are damaging or within the hearing range of marine mammals – those are bits of information that are transferable. Please read the paper and provide feedback.

Annex IV Ambassadors

Lars – In Norway there is not much communication between OES representative and Annex IV representative.

Lars – It is a little bit up to me how much time I should commit, especially since there is no formal agreement or support from the government.

Daisuke – We have contact with our OES rep. Ocean Energy Association of Japan (OEAJ) has no groups for environmental impacts assessment for MRE. So currently we contact specialists individually. We just started developing MRE in Japan so we are just starting to create the network. We will have more domestic workshops and will call some regulators or researchers to join and help construct the network and talk together about the current situation.

Andrea – let's see if we together can help you build those networks. Annex IV has a good profile with OES, but it should be that each of your countries understands what you are contributing. Ling do you have a sense of this?

Ling – I think there is a connection with OES in China, but not sure as they communicate with Dr. Wei so can't speak on it at this time.

Andrea – when you get these slides, please look at the list of ambassador activities and comment – “I don't see us doing this...”, “what about adding this activity?”. We will create the Google Doc and look for feedback from you.

Anne Marie – who will have access to the information?

Teresa - Do you want the activities to be regular, or just a way of being aware what is being done in other countries? What is the real purpose of this?

Andrea – The Google Doc will be protected, it is just meant for our use not for the public. This will help us be aware of what is going on in other countries, and as an analyst you should be engaged in these activities on a regular basis; the commitment from each country joining Annex IV is that each analyst will put in 20 hours a quarter. We hope this is a way to direct you through that and remind you of important activities.

Workshops

Melissa – hoping to get to ICOE, key priority; but not sure about METS or the others yet

Daisuke – for future meetings, EIMR will be difficult but I will be at ICOE and of course we will be at AWTEC.

Andrea – try to come to ICOE a day early for the workshop.

Lars – In Norway, there is a seminar next week for offshore floating wind in Bergen and I think there will be some stakeholders. I will send you some information on that.

Andrea – that would be great, we are happy to advertise

Ling – Dr. Wei should be at ICOE and AWTEC, but not sure about EIMR

Roundtable

Daisuke – We are holding a workshop next month, Gayle Zelewski from University of Maine will be there and I have asked her to talk about Maine/Alaska. Also a speaker from OpenHydro, developing a turbine with Nawasake. Focus of workshop is on consenting and permitting process, and invited some speakers who are working on developing offshore wind turbines from Ministry on the Environment and University of Tokyo. Have asked them to put their slides in English and will share them with you after.

Andrea – if you have the opportunity to video or audio record the workshop then we can put them up on Tethys with their slides

Daisuke – at the workshop we can introduce the regulator survey and Annex IV activities. We can translate the survey to Japanese and identify regulators and ask them to participate.

Andrea – let us know what we can do to help. Jonathan and Mikaela – this needs to be a high-priority task.

Lars –Waves4Power is doing well and recovered their buoy around Christmas, they are planning to make the next generation buoy. They are ambitious and want to set up a production facility. It is deployed on an island where we have the field station and where the ICES meeting will be held. Not sure what their schedule is, but have asked them to come to ICES meeting and talk about their project.

Melissa – at FORCE we are in the process of finalizing our 2017 annual report that will discuss results from monitoring programs and FUNDY Incentives R&D program – that will come out in a bit. Also have the summary data from year 1 of the fish, marine mammals, and seabird program from last year and can share that soon. There will be the MRE Canada conference which is mid-late Nov in Halifax, Nova Scotia and we are always interested in hosting side workshops and events in association with that. I can send more information. Industry and government attend quite heavily, making it a good opportunity to bring everyone together.

Jan – We have some updates coming in from me and Olivia and will send you some comments on today's discussions and things you have asked from us.

Juan – no news in Spain, the BIMEP test site is trying to obtain all the consenting to be able to test offshore wind, in addition to wave.

Anne Marie – similar to what Juan said, in Ireland we got a renewed lease for Galway Bay Test site, which is operational again, and the lease terms were expanded to include offshore wind.

Teresa – In Portugal, we are preparing for the installation of the new version of the Wave Roller technology this spring. We are supporting them in the licensing of a wave energy farm that they will build in 2020. Right now they are getting all the permits so NER funding scheme from EU can come

through (need all licensing permits ready by end of the year). Plans to install floating pre-commercial wind project in north of the country (further north from where the Principle Power WindFloat as deployed). Juan and I both applied jointly for a European proposal for the wave and tidal impacts, so first time we are joining efforts to put together environmental impacts on the Iberian Peninsula. Lots of hard work in the last two months to have everything ready for proposal.

Candace and Sam – nothing additional on the US side

Andrea – we will get you slides and notes out quickly, follow up on regulator survey, put google doc together and follow up on Ambassador activities.