

METS 2017 Poster Abstract

**The Next Phase of Tethys and Annex IV: Supporting Marine Renewables with Information Dissemination**

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For over six years, Tethys and Annex IV have collected and disseminated information about the environmental effects of marine renewable energy (MRE) to support an emerging industry. The culmination of the second phase of Annex IV produced the 2016 State of the Science Report, providing an international perspective on the environmental challenges faced by MRE deployments. This report identified three critical environmental interactions of greatest concern to regulators and stakeholders: collision, underwater sound, and electromagnetic fields. Addressing these interactions will require effective monitoring around deployments, targeted strategic research efforts to understand risk, and additional focus on monitoring technologies. At a critical time when industry is transitioning from demonstration scale devices to early commercial arrays, Annex IV phase 3 activities are poised to address these challenges.

The third phase of Annex IV (2016-2020) will continue most ongoing activities, such as quarterly webinars and the collection of metadata, while further engaging the regulatory community and addressing socio-economic issues. Webinars have focused on topics such as EMF from subsea cables and fish interactions with devices. Meanwhile, an expert forum series brings developers to discuss the technical challenges of environmental monitoring within high-energy flows around tidal turbines, and other relevant research topics. Metadata detailing environmental studies around project sites and research initiatives will continue to be collected and maintained, provided by Annex IV country representatives and strategic networks. As post-installation environmental monitoring datasets become available, Tethys will catalog datasets to assist the sharing of environmental information to the benefit of developers and regulators alike. With these activities and more, Tethys and Annex IV will continue to play a vital role in supporting the international MRE industry.