Marine Spatial Planning Addressing Climate Effects: MSPACE

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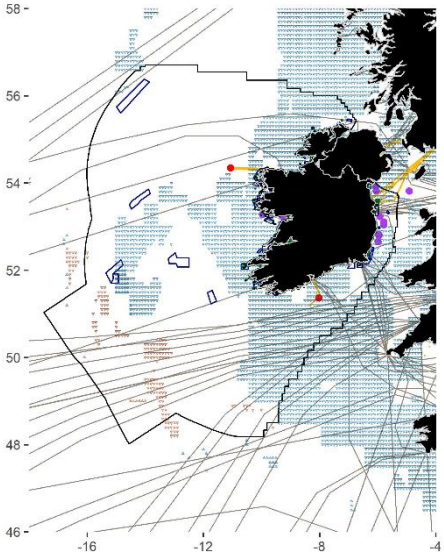
MSPACE is a £1.5M, 3 year, highly integrated, multidisciplinary project conceptualised to drive forward the capability of the four UK Nations in designing and implementing climate-smart marine spatial plans (MSP).

This is a global ambition as well as one specific to the UK. Building on recent UK- and internationally funded initiatives, MSPACE is underpinned by a vast catalogue of state-of-the-art marine climate change modelling projections for the environment, species and habitats, uniquely available to the consortium through existing expertise and partnerships, along with world leading modelling spatial meta-analysis methods. In MSPACE we will use these methods already tested in real life MSP development, and build on key partnerships with the UK policy and industry communities.

MSPACE will deliver a report on the vulnerabilities and opportunities that climate change presents to the near-term spatial management of the fisheries, aquaculture and marine conservation sectors across the UK Exclusive Economic Zone. This report will be delivered in liaison with the Marine Climate Change Impacts Partnership (MCCIP) utilizing the latest MCCIP models for rapid delivery of evidence to support policy. Four carefully considered, contrasting real-life MSPs across the four Nations of the UK will be used as case-studies throughout, enabling the application of the MSPACE tools to the complex and diverse national planning landscape. A detailed assessment of the needs and values of the planning stakeholder pools across the UK nations is also delivered, and guides how climate change modelling analyses will be communicated through the project's planned stakeholder engagement activities, including economic scenario exploration & analyses.



The distribution of climate change resilience and nature conservation in Ireland: example illustrating world leading modelling analyses methods applied in MSPACE.
In Global Change Biology doi: 10.1111/gcb.15827

These products feed into the main and final output of MSPACE: sets of case-study specific recommendations for the design of climate-smart, economically viable and socially acceptable strategies that support sustainable co-location of uses of the marine environment, marine conservation, natural capital preservation and resource exploitation. Co-development of the recommendations, using surveys, multiple-criteria decision analyses and other methods ensures they are relevant and responsive to the current and future priorities and needs of the regions covered by each plan, its stakeholders and governance structures. Lessons learnt from each case study will therefore be directly applicable to other MSPs in the same Nation due to their specific tailoring. Significant potential for application of the overall lessons learned in MSPACE to the broader UK planning landscape, including MSPs for overseas territories, is ensured through the diversity of UK planning contexts explored in the project, and the consortium's strong links to key marine industries and marine planning communities.

The MSPACE team brings together researchers and practitioners across the UK Nations, and global experts in ocean sustainability and climate change.