

CIA; assessment of Atlantic Herring spawning beds as an example of effective transboundary co-operation.

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In the UK, Cumulative Impact Assessment (CIA) has become a staple component of the licensing and regulatory assessment process. CIA considers the prospective impacts originating from new developments alongside impacts arising from existing activities. This assessment provides a representation of the disturbance experienced within UK waters, yet international transboundary effects are often overlooked or data is not freely available.

An assessment of Atlantic Herring *Clupea harengus* spawning beds was conducted. Seabed sediment maps, fisheries information and larval survey data were used to identify likely spawning sites. Interactions with seabed user activities and cumulative effects were then assessed for UK waters only. This methodology and the subsequent assessment have informed revised ICES management advice on activities interacting with spawning beds. The benefit of assessing single species interactions with developments is recognised, and the need for expanding the assessment to transcend territorial boundaries accepted. To extend this assessment to cover the geographic range of a mobile species such as Atlantic Herring requires more data than considered previously. A proposed wider mapping project seeks to include data from fisheries, renewable energy companies, dredging companies, and statistics and mapping experts. This co-ordination between sea users and policy makers will allow a more robust assessment of the interaction of Atlantic Herring with marine activities.

Extending beyond this initial single species assessment it is suggested that there is a requirement for the quantifiable assessment of other individual transboundary receptors such as habitats, and mobile species such as birds and mammals. This can only be achieved through effective co-operation and free data exchange between developers and policy makers. Without clear co-ordination and the inclusion of all parameters in a CIA the true extent of impacts on the receptor cannot be determined.