



1. Requirement overview:

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| Requirements | To improve the understanding of the linkage between fishing activity and resulting economic and social benefits |
| Requirement detail | <p>Development of methods to better describe social and economic outputs from fishing effort/landings for fishing vessels and allocate these to marine space. This is required to link fishing activity with the social and economic benefit that accrues from it.</p> <p>Presently the MMO collects and publishes data in relation to commercial fisheries and landings. This data covers:</p> <ul style="list-style-type: none"> • species caught • landed weight • fishing gear type • port of landing • vessel nationality • vessel length • catch value • catch location (ICES rectangle for over 10 metre vessels, ICES area for under 10 metre vessels) <p>As such, this dataset is detailed and covers all commercial fish landings. Though as noted we do not have complete spatial data on the catches of under 10 metre vessel catches.</p> <p>Recreational fishing (sea angling) has some limited data collection, though this is not linked to spatial activity information, which is less available than for commercial fishing and is derived from surveys.</p> <p>There is a requirement to look at methods of improving the linkage between the data available on fish catches and the data available on where fishing activity takes place. This requirement is for further work to improve this linkage, through developing and testing new methods, but also potentially by looking for new sources of data, or making suggestions to improve current ones.</p> |
| MMO use | Marine Planning: |

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| | <p>This level of detail would allow for identification of the most important fisheries, from an economic and social point of view, which might then result in specific plan policies that protect these areas.</p> <p>Marine Conservation: This is a specific requirement that would inform fisheries measures impact assessments for Marine Protected Areas.</p> |
| External interest | Natural England, Centre for Environment, Fisheries and Aquaculture Science |
| Delivery target | Q2, 2018 |

2. Aims and objectives

Aim:

Better understand the social and economic impacts of commercial and recreational fishing.

Objectives:

The objectives to deliver this requirement include to

- catalogue sources of data for commercial and recreational fishing
- assess their utility, in terms of spatial use, scale and resolution of data
- research methods for combining datasets to create better spatial linkages
- make recommendations for how combined datasets can be used, detailing their robustness and limitations

3. Existing evidence

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| MMO | <p>The MMO has undertaken a lot of work previously that is relevant. MMO1001 provides useful social and economic data on coastal communities at a fine resolution, whilst MMO1011 provides information on the distribution, trends and value of commercial fisheries in England. MMO1012 provides a catalogue of social and economic data across the board and MMO1035 provides a range of social impacts for fisheries and angling. MMO1060 follows MMO1035 and covers the other sectors covered by marine planning. The MMO also publishes monthly and annual sea fisheries statistics.</p> |
| Academic | <p>Whilst there is a substantial amount of information on fish distribution and stocks, it is often at spatial scales that do not fit easily with this requirement, or is habitat specific, for example Kaiser et al (2004). Philipson and Symes (2013) highlight the benefit of an interdisciplinary approach for fisheries management, whilst Borger et al (2014) demonstrate how interdisciplinary approaches can elicit information on valuation of non-market benefits from marine conservation.</p> |
| Other | <p>Cefas holds a wealth of relevant fisheries data on FishDAC and are also responsible for data collection under the European Union Data Collection</p> |

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| | Framework . Seafish provide economic information under the Data Collection Framework. |
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4. Current activity

Other than ongoing data collection activity under the Data Collection Framework, the MMO is not aware of any specific activity relating to this requirement.

5. Associated evidence requirements

| Ref | Title |
|------|---|
| R103 | The baseline social environment of English marine plan areas |
| R059 | The baseline social and economic environment local to marine protected areas |
| R088 | The spatial identification and categorisation of areas of particular importance to fish populations |

More information on these evidence requirements is available [here](#)

6. Potential delivery route

The MMO will look to partner with organisations of relevance to widen the potential impact of any work undertaken in this area. Similarly, where appropriate, the MMO will explore opportunities to influence the research of others to gather evidence that can be applied within a marine management context. As work progresses it is implicit that knowledge exchange is required throughout the duration of this requirement and not limited to when delivery is complete.

Partnering

Delivery window: Q2, 2018

Partnering with interested organisations has the opportunity to apply learning and experience from across a range of organisations in order to maximise the utility of work on this requirement.

Influencing the research of others

Delivery window: Q2, 2018

There is the opportunity for the MMO to support/influence the research of others in this field. Scientific research in this field has the opportunity to have high impact and be directly applied within marine management decision making. Opportunities and discussions are welcomed in this area.

See table 1 for timescales.

7. Contact

For more information or to add further research to the existing evidence list please email evidence@marinemanagement.org.uk

Table 1: Delivery timescales 2017 to 2020

| Delivery Route | 2017 | | | | 2018 | | | | 2019 | | | | 2020 | | | |
|---|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Partnering | | | | | | | | | | | | | | | | |
| Influencing the research of others | | | | | | | | | | | | | | | | |

Key

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| | No activity |
| | Actively undertaking |
| | Outside of delivery target |