Department for Environment Food & Rural Affairs

APPENDIX A: EVIDENCE PRIORITIES FOR UK GOVERNMENTS

The following appendix sets out a list of the foremost evidence needs from each of the 4 UK Governments under the FISP lots (I.e. the research gaps which are most important to enable delivery of Government objectives for those 4 Governments). Whilst projects will not necessarily score more highly just because they address one of these evidence gaps, this list may help provide ideas for research projects and may help you to demonstrate links to Government policy in your tender. FISP remains open to applications for any research which aligns with the FISP lots, proposals will be ranked based on the technical assessment.

Lot 1: Fisheries data collection

1. Finfish

Focusing on commercially important but data limited species as well as key choke species. Examples include Gurnards, John Dory, Pilchards, Lemon Sole, Cod, Whiting, Hake, Saithe, Ling, Blue Ling and Skates and Rays

A. Improved data on species migrations (esp for Mackerel)
B. Research into stock identification
C. Development of abundance/biomass and fishing mortality indices.
D. Assessment and development of different stock assessment methods particularly for data limited species.
E. Research into roles and importance of non-quota finfish in the wider marine ecosystem
F. Identification of essential fish habitats and a greater understanding of its role in fisheries management.

2. Shellfish

Focusing on crabs, lobsters, whelks, cockles, scallops (king + queen), Nephrops and cuttlefish and work to inform management approaches

A. Development of more accurate and robust abundance indices
B. Improved understanding of mortality rates – both natural mortality and fishing induced mortality
C. A better understanding on population structure - specifically, regional variability in growth rates, maturity, and reproduction-to support stock definition and boundaries, and the implementation of management approaches (e.g. quota)
D. Assessing and mapping the location and extent of known whelk, scallop, cockle beds to support data collection pathways and frameworks
E. Effectiveness of existing shellfish management mechanisms

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Lot 2: Mixed fisheries, selectivity and the environmental impacts of fishing:

1. Environmental impacts of fishing

A. Improved understanding of impacts of fishing on diadromous species (e.g. salmon and eels).
B. Assessment of impacts of fishing gear/methods on designated and non-designated habitats and features within marine protected areas. This would need to be compared with appropriate control site(s) outside of the marine protected area.
C. Impacts of fishing gear and methods on blue carbon habitats.
D. Improved understanding of environmental impacts of abandoned/lost/discarded fishing gear, including aquaculture gear.
E. Research into mixed fisheries reference points and scenarios and then who these can be integrated into current fisheries management practices.
F. Further research, alongside the development of models and tools to allow fisheries manages to understand and balance fishing opportunities in mixed fisheries.
G. Improved science communication of mixed fisheries models and outputs.
H. Understanding the implications on fisher's catches of switching to gear constructed from a single material or built in a way that drastically facilitates material separation for recycling (e.g., avoiding use of leaded ropes or mixed material nets).

2. Bycatch (including PETS bycatch and gear selectivity measures)

A. Research into the Bycatch risk for different gears and species and a development of improved ways of communicating these risks (including endangered, threatened and protected species) Identify mitigation measures and innovations to reduce discarding that could be practically and realistically trialled or implemented in fisheries.
B. Facilitate specific trials to develop discard reform measures e.g. mesh sizes, design and construction.
C. Identify potential barriers to implementation of gear selectivity measures and help address such barriers.
D. Data to improve understanding of catch patterns, composition and discarding in fisheries catching key choke species (e.g Celtic Sea cod, North Sea saithe)