## Research and analysis: Impact of external pressures on fisheries in Western Waters (area 7)

## Requirement R046

## Requirement detail

Current fisheries fleet forecasting models used in marine management are unable to account for some pressures which may affect activity within the fishery (such as quotas in other areas, stock price change, availability and diversification). Exploration of the impact of these pressures on fisheries activities would allow identification of high risk pressures which could, in turn, be used to improve forecasting model outputs. This requirement is specific to 'Area VII' for forecasting the behaviour of the scallop and crab fisheries. In particular it is considered important to explore how stock availability in other regional fisheries, local to Area VII, affects fishing effort.

At this time, models make predictions based on historic data within the area. These models are currently unable to incorporate other potential behavioural drivers. Evidence is required on what other pressures may be driving fisheries behaviour within Area VII, and whether there are datasets with suitable coverage in time and space that can be utilised to further improve model predictions.

The aim is for a range of predictor variables to be identified through this project, with those demonstrating significant improvement in forecasting being included into an improved model.