

Fully documented fisheries (Catch Quota Trials)

North Sea (IV&VIId), Eastern Arctic (I&II), North Atlantic (V-XIV and NAFO areas)

Data acquisition

The current Common Fisheries Policy is underpinned by a quota system that is based on quantities of fish landed rather than fish caught (total fishing mortality). This system, coupled with effort limitation schemes, provides little incentive for fishermen to avoid catching and discarding unwanted fish.

In October 2009 a joint statement by UK, German and Danish Ministers agreed that further work on piloting fully documented catch quota systems using Remote Electronic Monitoring (REM) as a catch verification tool should be carried out. The rationale being that fully documented fisheries (FDF) has the potential to significantly reduce discards by making fishermen account for all catches against their quota. The catch quota system is based on placing an absolute cap on fishing mortality. All fish caught are accounted for and when fishermen reach their quota limit they have to stop fishing. It is anticipated that the fishing industry would adopt a greater sense of responsibility in ensuring sustainability of fishing opportunities under such a system.

Since 2009 a number of trials have been run by European Member States including the UK. Vessel participation in the UK trials is on a voluntary basis. Initially, the English scheme largely concentrated on North Sea cod. However, the English scheme has since been expanded to include Western Channel haddock, sole, plaice, megrim, hake, anglerfish, cod, whiting and skate and ray stocks.

(a) Type of data collection

CCTV information and administrative information (logbooks, sales notes and landing declarations).

(b) Target and frame population

The project in 2016 currently has twenty participant vessels. Twenty-two vessels joined the scheme at the start of the year but two were subsequently sold outside of England.

Vessels currently on the scheme include fifteen North Sea vessels for which North Sea cod, haddock, plaice and saithe discard data is collected. In addition, four West Channel beam trawler vessels for which discards of Dover sole, plaice, anglerfish, megrim, hake, skate and ray species, cod, haddock and whiting are recorded. Finally, one West Channel otter trawler vessel for which haddock, megrim, hake, anglerfish and whiting discard data is collected. The West Channel otter trawler also works jointly with the MMO and CEFAS on the Neptune 2 project to monitor Common Skate spp.

Vessels are primarily based in the ports of Peterhead, Scarborough, Newlyn, and Plymouth. The number participating in 2017 will depend on the number of vessels which voluntarily rejoin the scheme.

(c) Data sources

Data sources comprise the following:

1. Electronic logbook data.
2. Landing declarations.
3. Sales notes by species and grade.
4. REM and CCTV data for all trips, including winch activity, vessel position and speed and CCTV footage.

Data quality evaluation

REM footage analysis will provide further information on the use of REM in different fisheries as a means of collecting validated data. It also allows the MMO to work with the fishing industry in progressing towards Fully Documented Fisheries (FDF). In addition, it will assist in the understanding of 'choke' species and what methods may be used to address this issue.

There needs to be sufficient confidence that no discarding of catch quota species takes place at any stage of the trip and in the level of accuracy of estimates from observed hauls. 100% observation of REM footage is not viable and it is assumed that there is potential for discarding or undeclared landing out of camera view (i.e. outside of the hauling and sorting operation).

The analysis of footage and corresponding records will therefore cover the following checks to ensure:

1. Comparison of 10% of haul records (logbooks, landing declarations, sales notes) against corresponding REM data.
2. Data quality verification – checks for missing data and quality of data provided.
3. In the North Sea, where there are known drivers for high-grading of certain species – grading comparisons from sales notes of REM vessels and non-monitored vessels.
4. In the Western Channel – comparisons of skipper records against observed discards.

Data presentation

Reporting is achieved via an annual report for each of the three trials. Reports are sent to Defra and to the European Commission. These reports are also made publicly available online here: <https://www.gov.uk/government/collections/catch-quota-trials-reports>

Reporting will cover the following project objectives/topics:

- Improvement in catch data gathering methodologies for mixed species catch quotas
- Effectiveness of catch quota management to reduce fishing mortality in high discard fisheries if quota is made available.
- Effectiveness of REM for data gathering in the context of a wider range of mixed fisheries.
- Assess catches of potential choke species such as cod and haddock and potential methods for reducing choke species issues.
- The potential for REM fleets to be used for reference data i.e. a subsection of the fleet that has the ability to provide representative data for that fleet (work on this is planned in conjunction with Cefas in 2017).
- To assess the use of REM as a means of quantifying by-catches of protected and sensitive species.
- Contribute and feed data into scientific assessments on the effectiveness of CQ pilots in reducing discards and catch mortality.