

Independent data validation Onboard camera field trial

Fisheries Queensland, in partnership with the Commonwealth Department of Climate Change, Energy the Environment and Water (DCCEEW), is running a field trial on priority trawl fishing symbols to test the ability of onboard cameras, control systems and software to electronically monitor commercial fishing activities and identify when **threatened, endangered or protected species** and other **bycatch** are caught by, or interact with, fishing gear.

The field trial will:

- test if the equipment is compatible with different fishing methods and various boat types and layouts
- identify the challenges and opportunities of an onboard camera system and work with fishers to determine how best to install and operate systems during day-to-day fishing operations
- evaluate different methods of video footage and data transfer
- develop standard protocols for reviewing onboard camera footage
- evaluate key components for program service delivery and develop accurate cost estimates.

Please note: Independent observers will also be used during the trial so the data they collect can be compared with the data collected by the cameras.

! Fisheries Queensland and DCCEEW will handle all personal information arising from the trial as required by the *Information Privacy Act 2009* (Qld) and the *Privacy Act 1998* (Cth), and will not disclose it for any purpose other than the field trial unless authorised or required by law. See page 6 for more information.

Industry benefits

- Understand how an onboard camera system can operate on fishing vessels to monitor catch and protected species interactions.
- Work closely with Fisheries Queensland and the Australian Government to identify operational concerns and solutions that arise during the trial.
- Help shape what an onboard camera program will look like for your fishery.
- Help evaluate and provide direct feedback regarding the feasibility and design of an onboard camera program.
- Provide greater capacity for skippers of larger vessels to monitor components of their fishing operation and catch processing from the wheelhouse.

Trial fisheries

The field trial will focus on the priority trawl fishing symbols listed below (Table 1), as these fishing operations have a higher likelihood of interacting with threatened, endangered and protected species and/or bycatch.

Table 1: Summary of priority trawl fishing symbols for the onboard camera field trial

Fishery	Fisheries symbols	Activity
East coast trawl fishery	T1, T2, M1, M2	Trawling
East coast stout whiting fishery	T4	Trawling



Australian Government



Queensland
Government

Costs

There will be no cost to you. All costs associated with the field trial will be covered by the Queensland and Commonwealth governments.

How the field trial will work

An overview of the field trial and its key components is provided in the sections below. A summary is also shown in Figure 1.

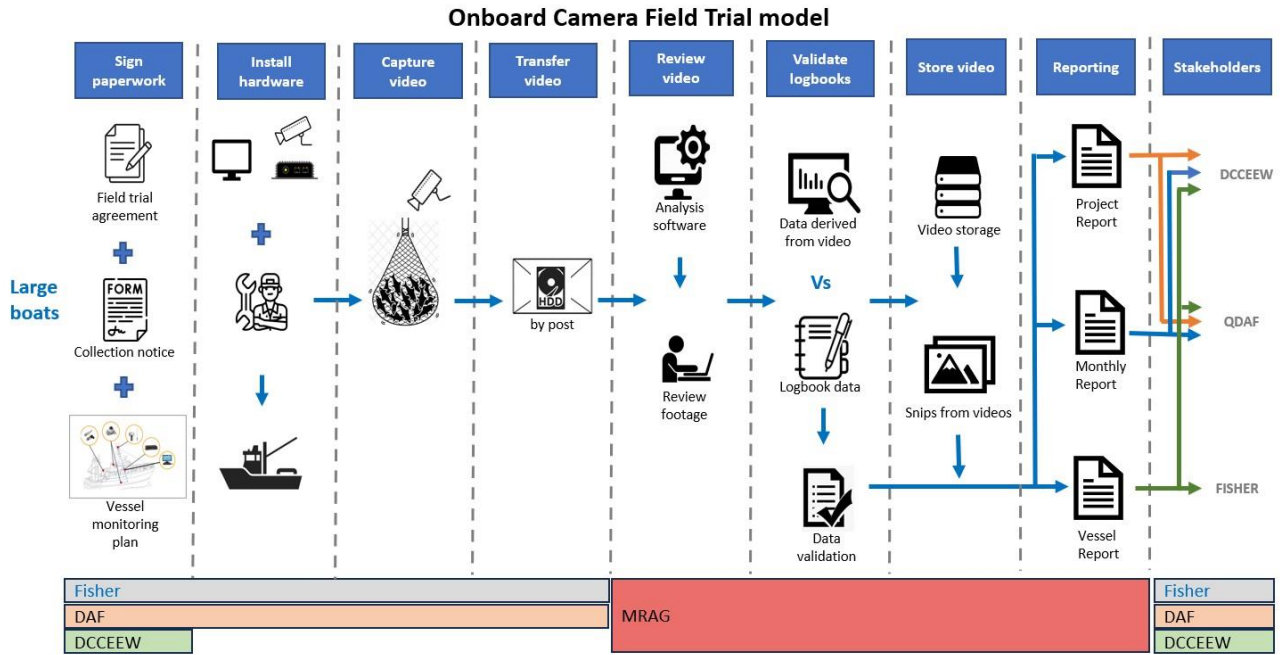


Figure 1: Overview of onboard camera field trial

Field trial agreement

A field trial agreement will be established between the commercial fishing licence holder, the fisher in control, Fisheries Queensland and the Australian Government.

The agreement sets out the terms of participating in the field trial.

Collection notice

Each vessel participating in the field trial will be provided with a collection notice and CCTV poster to be displayed on the vessel. The collection notice explains how personal information will be collected and handled as part of the field trial. This is to ensure all people working on the vessel during the trial period are aware of the purpose of the onboard cameras and that their personal information may be captured in the video footage.

Fisheries Queensland will ensure the onboard camera equipment is installed in a way which minimises the collection of personal information. However, if Fisheries Queensland, DCCEEW or the independent reviewer collects, uses, discloses, transfers or otherwise handles personal information, it must:

- comply with all applicable privacy laws
- keep personal information safe and secure, and protected from unauthorised access and disclosure and misuse; and
- co-operate with the Participant and the Authority Holder in the resolution of any complaint under, or relating to, any of the laws, codes or policies.

Vessel monitoring plan

We will work with each field trial participant to develop a unique vessel monitoring plan (VMP) suitable for your vessel and fishing operation. The VMP will need to be approved by the vessel owner, commercial fisher in control, the relevant technicians responsible for installation of the equipment and Fisheries Queensland. The VMP consists of a preliminary vessels inspection where we identify suitable locations to position the camera equipment and discuss the fishing and fish handling processes relevant to each vessel. Following installation images and information of the installed equipment are taken and recorded in the VMP. The VMP also includes trouble shooting information to assist the skipper with operation of the equipment when at sea.

The VMP will outline:

- boat information
- boat contacts
- The fishing and fishing handling processes
- the boat layout and where the equipment will be installed
- the responsibilities of the commercial fisher in control
- how to maintain the onboard camera equipment
- trouble shooting processes and information
- installation

Fisheries Queensland owns the cameras and will organise the installation of hardware by qualified marine technicians (you may be able to select your own technicians, or we can arrange one for you). The following image shows a typical installation on a large vessel (Image 1).

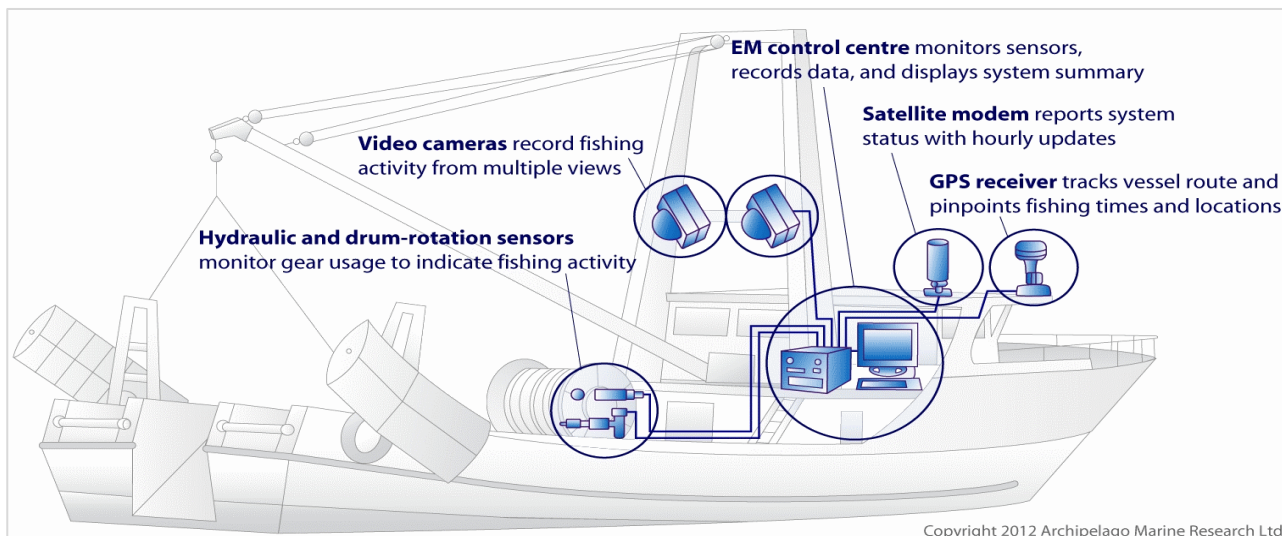


Image 1: Overview of general installation of onboard camera equipment

Cameras will be attached to the vessel and positioned to capture footage of gear retrieval and catch processing. Some onboard camera systems have sensors to detect when gear is being deployed or hauled and can trigger the cameras to start recording at these times only.

Large vessels

Large vessels are trawlers over 8 m and have:

- permanent superstructure available for mounting cameras
- a cabin/wheelhouse that provides protection to the equipment from the elements
- a reliable onboard power source of 12V, 24V or 240V
- mechanical equipment to set and retrieve nets.

Onboard camera systems usually include:

- 1 or more cameras
- a monitor
- a central control unit with data storage
- a satellite modem
- a GPS receiver
- gear sensor/s.

The following onboard camera systems will be tested of trawl fishing vessels. These are examples only and the final solution you receive may vary.

Anchor Lab (anchorlab.dk)	Archipelago (archipelago.ca)
	
Satlink (satlink.es)	Taylor Marine (taylormarine.com.au) and Teem Fish Monitoring (teem.fish)
	
Shellcatch (shellcatch.com)	CCTV cameras
	

Maintenance

You will need to maintain the cameras and other equipment by:

- checking the system is on and working at the start of a commercial fishing trip and each day during that trip
- regularly wiping encrusted salt and debris off the camera lenses
- reporting any malfunctions or damage to Fisheries Queensland.

Training

You will receive face-to-face training on how the onboard camera system works and system-related training materials. Technical support will be provided by Fisheries Queensland and the camera system suppliers throughout the field trial.

Please note: If the onboard camera system malfunctions, you can still continue to fish.

Transfer of video and data

The video footage and associated data from the onboard camera systems will be sent to MRAG Asia Pacific. MRAG Asia Pacific have been contracted by the Australian Government as an independent third-party contractor to review the camera footage and derived data. Depending on the camera system, it can be sent via satellite, 4G, 3G or post. All footage will be encrypted by the onboard central control unit before it is sent to the reviewer. This means the video footage can only be accessed by the third-party reviewer.

Please note: All video footage and associated data will be securely stored by the reviewer (their contract binds them to the Commonwealth *Privacy Act 1988*).

Review of video and data

Video footage and associated data from the onboard camera systems will be reviewed for threatened, endangered and protected species interactions, bycatch and camera system performance by MRAG Asia Pacific.

MRAG Asia Pacific will provide reports summarising the performance of the onboard camera equipment and the comparison of catch, bycatch and protected species interactions seen on the camera footage and reported in logbooks. Copies of the reports will be provided to DCCEEW, Fisheries Queensland and field trial participants.

Please note: Authorised Fisheries Queensland staff will view some of the video footage to evaluate the field trial.

Data validation

The third-party reviewer will compare the data collected by the cameras with logbook information to see if it confirms reported interactions and bycatch.

Your privacy

If the onboard cameras capture images of boat operators or crew members, those images will be classed as personal information under the *Information Privacy Act 2009* (Qld) and *Privacy Act 1988* (Cth). All government employees and contractors are governed by their relevant state or federal privacy law and any personal information collected during the field trial will be managed in accordance with the relevant Act.

Queensland's ***Information Privacy Act 2009*** creates rules about the handling and security of personal information, including footage of individuals. Fisheries Queensland will handle all personal information arising from the trial as required by the Act, and will not use or disclose it for any other purpose, unless authorised or required by law

Queensland's ***Right to Information Act 2009*** and information privacy legislation is designed to make government information, that is in the public interest, available to members of the community and provide a framework for the lawful management and handling of individuals' personal information.

Video footage, associated data and analysed data are all classed as government records. This means any footage and data from the field trial can be applied for under the Right to Information Act, but it will not necessarily be released.

If a request for information is received, the person/s affected and Fisheries Queensland will be consulted and given the opportunity to clarify the request or appeal the release of information. Dedicated Right to Information staff or the Office of the Information Commissioner are responsible for determining if the requested information is in the public interest and should be released.

Progress updates

Updates will be published at daf.engagementhub.com.au, including information about the progress of the field trial and relevant documentation. A technical focus group has been established with Fisheries Queensland, DCCEEW and field trial participants to facilitate regular feedback and troubleshooting of issues as they arise.

Evaluation report

At the end of the field trial, the Australian Government and Fisheries Queensland will review feedback from participants, evaluate the results and make recommendations about the use of onboard camera systems on commercial fishing boats. The evaluation report will be made available online.

Get involved

We need your help to trial these onboard camera systems in real-world situations on commercial fishing vessels – more fishers in the field trial means the equipment can be thoroughly tested on various fishing methods, operations, boat sizes, locations and environmental conditions.

Please note: The field trial is voluntary and you can stop at any time – just let us know and we will arrange a time with you to remove the equipment from your vessel.



REGISTER YOUR INTEREST – call 13 25 23 or email datavalidation@daf.qld.gov.au.