

# Satellite Applications

Fact Sheet

Working Together  
to Prevent Illegal  
Fishing



We work with  
**Innovate UK**

**CATAPULT**

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The Catapult platform offers governments, port authorities and law enforcement agencies a cost-effective, trusted system which can be used across many agencies.

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## A Global Crisis

Illegal fishing is a global crisis, causing widespread social, environmental and economic damage.

It is estimated that the current economic impact of illegal fishing is \$23.5 billion per year, equating to one in five fish being caught outside the realms of the law. Illegal fishing also impacts on the livelihood of small villages; it is estimated that around 12% of the world's population is reliant on fisheries and aquaculture, and approximately one billion people, largely in developing countries, rely on fish as their primary source of protein.

## Using Satellite Technology

Since 2013, when the Catapult held a maritime workshop which highlighted this problem, we have been working with a number of private and government organisations to design and develop a cutting-edge technology platform to help address this issue. The platform uses satellite monitoring and imagery with other data sources, such as fishing vessel databases and oceanographic data, which provides real-time data on shipping vessel activities that can monitor and detect illegal fishing and other related activities, such as human and drug trafficking.

## Current Trials

The Catapult platform is currently being trialled in several areas, including the Pitcairn Islands – an overseas territory of the UK – to help track illegal fishers. The Pitcairn Islands were proposed as a marine reserve in March 2015. The reserve covers over 320,000 square miles and is home to more than 1,240 species of marine mammals, seabirds and fish.

Within a marine reserve, if a fishing vessel is not directly transiting, does not have its gear fully stowed, or its automatic identification system (AIS) on, it is in violation of the reserve and can be apprehended by the port authorities. These marine reserves have special rights regarding the exploration and use of marine resources, which means fishing is prohibited in these areas.

## Global Benefits

The Catapult platform offers governments, port authorities and law enforcement agencies a cost-effective, trusted system which can be used across many agencies. It has a global reach, as satellites cover most of the world's oceans, and provides a local focus adapted to each nation. The integrity of the system cannot be compromised by the illegal fishers as it comes straight from the satellites and other official monitoring agencies.

The platform can be also used to verify and validate legal fishing activities. Supply chains can then monitor their boats to track where fish is caught. This can help reduce the search space for illegal activity. Money invested for traceability schemes can be used to subsidise capacity building in developing nations and raise the bar for fishing globally.

## About the Satellite Applications Catapult

The Satellite Applications Catapult is an independent innovation and technology company, created to foster growth across the economy through the exploitation of space. A not-for-profit company, we aim to inspire others to innovate using satellite technologies by supporting the development of new products and services. We help organisations to realise the potential, and implement the use, of satellite technologies, and bring together multi-disciplinary teams to generate ideas and solutions in an open innovation environment.

For more information about the Catapult illegal fishing platform or activities, please contact: [info@sa.catapult.org.uk](mailto:info@sa.catapult.org.uk)