# Fishstock Traceability

**Absolute Software**

## Office
## At-Sea
## Dockside
## Retail

### Fisheries Policy

- Regulations
- Permits/Licences
- Quotas

- On-line Registration
- On-line Transfers
- On-line Trading

- Digital Certificates
- Electronic Invoices
- Proof of Transfers

### Vessel Monitoring

- GPS Tracking
- Gear Sensors
- Observer Data Entry
- Electronic Catch Reporting

- Area Restrictions/Closures
- Time-in-Area Management
- Catch Restrictions
- Quota Tracking

#### Surveillance

- Satellite Imagery
- Air Patrols
- Sea Patrols
- Boardings

#### Enforcement

- Dockside Inspections
- Evidence Preparation
- Automatic Crosscheck of At-Sea vs. Dockside Catch Reports

### Catch Verification

- Electronic Weighing Systems
- On-line Landing Reporting
- Catch Documentation

- Traceability Certificates

- Barcode Issued

### Supply Chain

- Auction
- Processor
- Distributor
- Retailer

- Consumer

Verify location and method of catch using barcode

# Absolute Solutions for Fishstock Traceability

**Absolute Software**

## Fisheries Policy

Absolute is a leader in interpreting complex fisheries regulation. We deliver proven solutions for on-line registration of vessel owners and electronic issuing of fishing documents (including certificates, licenses, permits and quota). As many fisheries entitlements become tradable commodities there is a growing demand for secure, scalable and user-friendly systems. Absolute's Fleet Information System™ meets these requirements and is considerably cheaper than in-house developed solutions.

One of our clients is the South Pacific Forum Fisheries Agency (FFA) - who act as a central clearinghouse for 17 countries within the South Pacific by issuing Certificates of Good Standing for fishing. As an early adopter of Absolute's Fleet Information System™, FFA have demonstrated that a single integrated system can deliver services to stakeholders including Coastal Administrations, Vessel Owners/Agents/Charterers, Flag Administrations and Fisheries Statistics organizations.
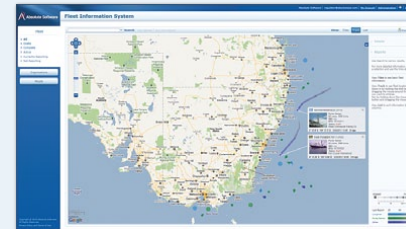
▶ **See FFA Client Case Study**

## Vessel Monitoring

More than just GPS tracking, Absolute's solutions for VMS include state-of-the-art alerting functions, to provide actionable intelligence on vessel behavior. Many fisheries regulations incorporate limits on the total number of fishing days per-area, and we provide rule-based systems to automatically monitor compliance. GPS track information is then combined with Electronic Logbook reports filed by operators and observers - with all data received in real-time via the VMS terminal to provide the most accurate and up-to-date picture of vessel activity.

Equally important is sending VMS tactical intelligence to where it can best be used to in detecting and deterring Illegal, Unregulated and Unreported fishing (IUU). We use a number of technologies for this purpose including Satellite based Synthetic Aperture Radar and data formats that integrate VMS data into the tactical displays on-board Navy and Airforce patrol assets.

An Absolute client that integrates many of these technologies, as a part of their coastal Monitoring, Control & Surveillance strategy, is the Australian Fisheries Management Authority (AFMA).
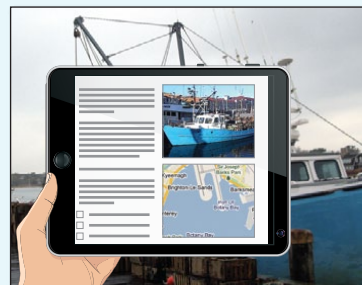
▶ **See AFMA Client Case Study**

## Catch Verification

Catch reporting takes place both at-sea, though electronic reporting systems, and upon landing with the submission of dealer, agent or action house landing records.

Many agencies today require a form of landing report, but this information is often delayed in receipt and is not well integrated. Absolute offers a single system that can load and convert data from both at-sea and at-dock landing reports - making it available immediately for port inspection personnel via 3G/4G handheld tablets (owner information, quota, licence documents, photos, crew details, current and past VMS tracks and catch records).

Absolute is currently working with the National Oceanic & Atmospheric Administration (NOAA), in conjunction with three other fisheries management organizations, to develop formats for electronic logbook data covering the world's major Tuna resources. Our systems are designed to meet the traceability requirements being introduced by the EU, North American and Japanese authorities.

▶ **See NOAA Client Case Study**

## Supply Chain

In many countries there is a consumer driven focus on catch certification at point-of-origin. One of our clients, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), leads in this field by requiring continuous VMS track data before issuing Catch Documentation Certificates.

Absolute's efforts to extend Fishstock Traceability towards the consumer are a work-in-progress, and require cooperation and interoperation between fishing operators, government regulators and technology suppliers. Absolute is in a unique position to assist as the technology for issuing digitally signed traceability certificates, with embedded 2D barcodes, is a core feature of the Fleet Information System™. Basic information is available upon scanning/photographing a 2D barcode (without requiring reference to external databases or websites), while more sensitive information, such as the exact location of catch, is not disclosed but is available to authorized parties with logons to the Fleet Information System™ only.

▶ **See CAMALAAR Catch Documentation Scheme**