Overfishing due to poor fisheries management is a serious problem worldwide. Every year, millions of tons of fish are stolen from our oceans and brought to market disguised as legal catch. Pirate fishing is a multi-billion dollar industry that endangers marine ecosystems. It continues because it is profitable: pirate fishers find it easy to bring their tainted goods into ports, across borders, and onto our store shelves and restaurant menus. A crucial step against illegal, unreported and unregulated fishing is transparency.

WWF and navama work globally to enable transparent fishing operations and to ensure that the seafood on the markets is fully traceable to legal sources. The TransparentSea Initiative works on different levels using the advantages of the Automatic Identification System (AIS), the Vessel Monitoring System (VMS) and other technologies to monitor fisheries and make fishing activities transparent.

**AIS** is a widely used anti-collision system. It communicates automatically GPS location, speed, direction of travel and ship identity and other navigation information in near real-time. It can be used to identify and locate vessels by other nearby ships, AIS base stations and satellite.

**VMS** is a fishery management system which allows selected groups to track and monitor the activities of fishing vessels in near real time. It offers bi-directional communications and is based on a satellite communication system. Its explicit functionality varies with the requirements of the nation of the vessel’s registry, and the regional or national water in which the vessel is operating.

**Other** technologies entail vessel tracking systems based on mobile network technology and GPS location. They are developed to track small scale fishery vessels and have a low power consumption and low operating costs.
seeFish

Tracking from catch to plate

seeFish builds on modern technology to establish a consumer-friendly traceability system from catch to supermarket shelf. Consumers will be able to trace products back to the catch location with smartphones and tablet PCs. Satellite technologies, modern database management and automated analysis procedures play a vital role in tracking fish products. It is a joined project of Luxspace, WWF and navama, funded by the European Space Agency (ESA) and German Aerospace (DLR).

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TransparentSea.org

Fisheries voluntarily share their AIS, VMS, GPS track

WWF and navama developed a platform which offers fisheries worldwide the possibility to register and make their fishing activities transparent. With their registration fisheries agree to share 24/7, either satellite AIS data, VMS data or other location based information data of their vessels with independent experts from WWF, navama, other NGOs, governments and science. Registered fisheries can show that they are committed to legal and responsible fishing, and respect boundaries of sensitive marine areas.

http://www.transparentSea.org

seeOcean

Monitor and visualize fishing activities worldwide

seeOcean is a web-based analysis tool for marine geographic information, and AIS, VMS and other systems. It offers global coverage of satellite and terrestrial AIS data from today back to 2009. Vessel activities can be analysed in the context of oceanographic data, Marine Protected Areas, landing sites and transshipment. http://ocean.navama.com

smartTrack

Low cost, low maintenance, robust tracking devices

smartTrack supports small scale and artisanal fisheries who seek better access to efficient and affordable sustainability certification processes. It is a project in which WWF and navama test and install various position tracking systems on artisanal vessels, supplied with solar power where necessary.

For more information

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