

# Applied Technology – Software Development

Applied Technology group specialise in software development, maintenance and support of bespoke software, tailored to customers' requirements.

We offer expertise in software application consultancy, development and maintenance.

Our purpose is to provide our customers with high quality, reliable and cost effective software solutions that meet their business and scientific needs.

## Technical Capabilities

Applied Technology have a proven track record in managing large and complex fisheries, environmental, management information and technology projects, including the use of advanced geographical information systems (GIS) and the processing of remote telemetry data. Building systems that provide workflow solutions for administrative and regulatory work.

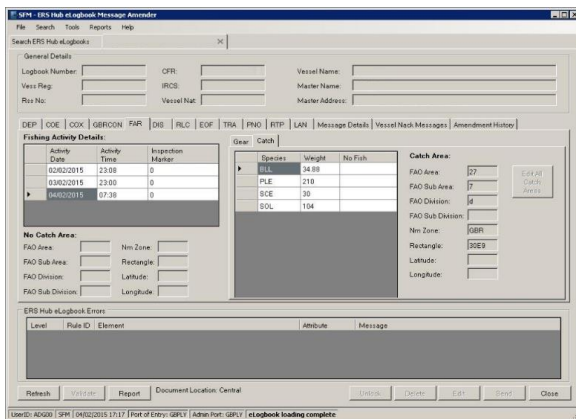
## Services

Software application design, development and maintenance:

- Thick/Thin Client multi-tier applications using latest Agile development tools
- Deploying applications across mixed, complex architectures.
- Web technologies
- Mobile apps
- Embedding sophisticated browser based GIS functionality into applications that handle spatial data
- Application consultancy
- Project support (PRINCE2/APM/ITIL)

## Integrated Fisheries Management Systems

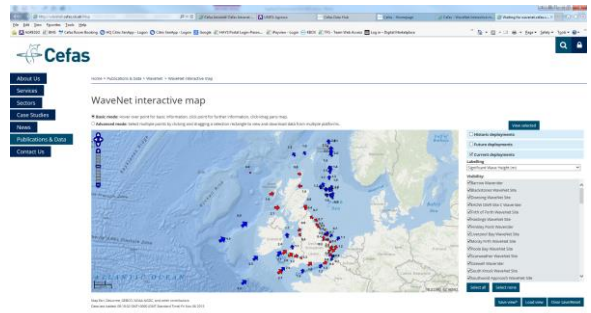
Successful fisheries management requires that all information sources and user requirements are thoroughly integrated into one system. For the past 15 years, Cefas has been responsible for the development and operation of Defra's integrated fisheries management information systems, providing the core of Defra's Sea Fisheries Management System, and is interfaced to the systems of other Governments and to the regional databases operated by the European Commission.



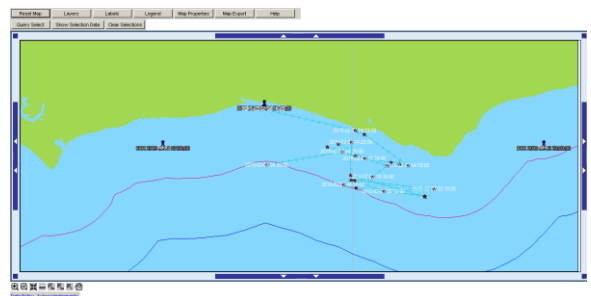
- Fishing Activity Database  
Holds details of catch data entered at local ports.
- Vessel File, Licensing & FQA  
Holds the details of the registered fishing vessels, including physical dimensions and ownership. Issues licenses and maintains records of entitlements.
- SFM Sea Fisheries Management System
- eLogbook & eSalesnotes
- UK Fisheries Monitoring Control and Surveillance System  
Holds the location of vessels to aid monitoring and enforcement. Includes satellite positions, physical sightings from aircraft, naval vessels and shore enforcement staff. Tracks and progresses prosecutions.
- Vessel Monitoring

## Geographical Information Systems

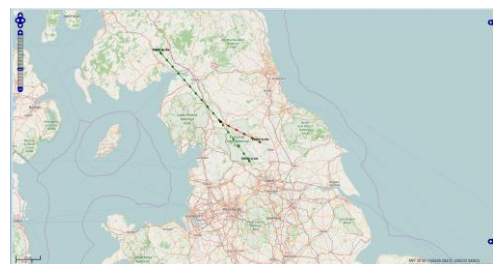
Experienced in developing GIS functions embedded into our software solutions.



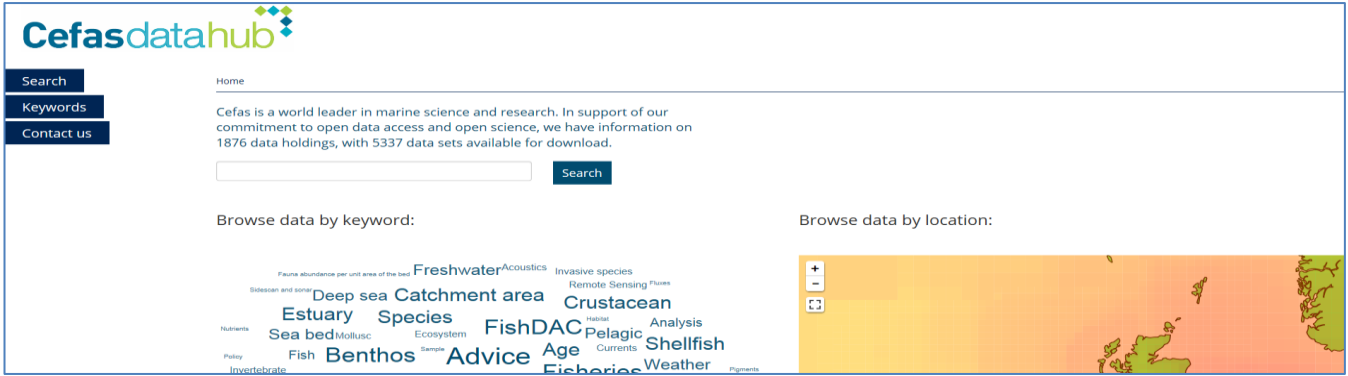
- Deployment of internet-based mapping applications that allow the display of data e.g. real-time telemetry data from its buoys at sea.
- Deployment of a suite of marine planning tools that run within the ArcMap product.



- Geographical Information System capability for tracking outbreaks and for implementing control measures.



Experience in MapXtreme, GeoServer, ESRI and Open Layer.



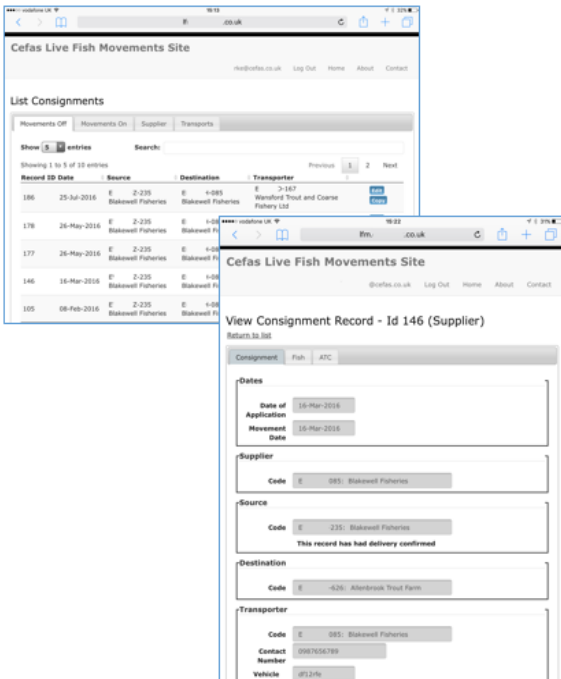
## Website Development

Specialists in mobile friendly website development, with broad experience of deployment via the GDS (Government Digital Service) framework.

### Cefas Data Hub development and deployment.

Cefas is a world leader in marine science and research. The creation of the Cefas Data Hub online portal allows the public and UK businesses to explore, download and reuse the data for their own research, and supports Cefas' commitment to open data access and open science.

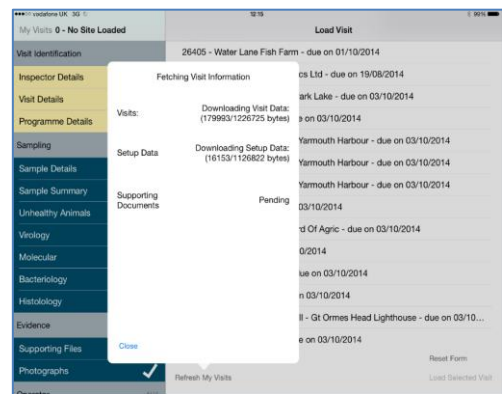
**LFM (Live Fish Movements) mobile website** to provide online access to record live animal movements. The transporter will be able to generate an online/onscreen ATC (Animal Transport Certificate) during transit with the consignment. Real-time data recording will allow the FHI to access to transport records rather than waiting for scheduled Inspector visits to confirm.



## Mobile Applications

Development and deployment of smartphone/mobile apps on Android and iOS platforms.

**FHIPad app to support STARFISH.** A native iPad app used by Cefas Fish Health Inspectors to support their regulatory visits to fish farms. Completed visit information is transmitted to the main STARFISH database as soon as the visit is finished so that lab-based FHI staff can respond to the information collected more quickly.



### FINS (FishingInfo National Science) Anglers Catch Log.

A smartphone app (on IOS & Android platforms) for anglers to log georeferenced details of the fish they catch directly from the lake-side, river bank, boat or shore. This reporting platform will be used to collect data that can be used to accurately map the distribution and health of wild fish populations throughout the freshwater and marine aquatic environment.



## POND-SHRIMP

A smartphone app, with a database, for recording pond diagnostic information for the SE Asia Shrimp industry that will connect via Bluetooth to multiple Genedrives™ to report the test result, as well as record additional information about the sample.



Genedrive™ with test running to app on a phone



5 Genedrives™ running tests to app on 1 tablet

## Quality Assurance

- Qualified project support PRINCE2, APM, ITIL
- Certification to ISO 9001
- Cefas is an accredited Investor in People

## Consultancy and Collaboration

We have worked with the Government of Latvia in the design and procurement of the systems that they needed to comply with the Common Fisheries Policy when they joined the European Union.

We are currently active in the Middle East, providing IT application advice and guidance to government departments, public authorities and scientific institutes in Kuwait to help them respond to environmental challenges around their coast.

## Desktop Applications

Substantial experience in the design, development and deployment of desktop applications, both in a thick and thin client environment.

## OCNS - Offshore Chemical Notification Scheme

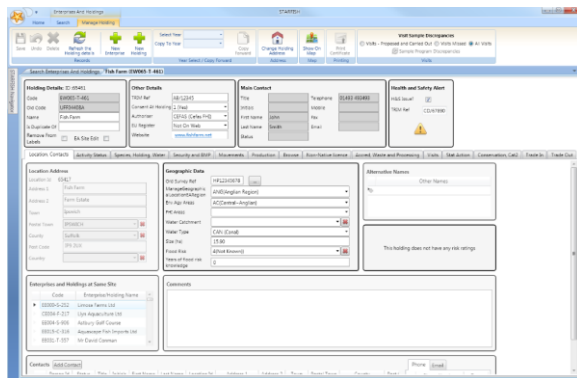
An interactive database containing all relevant information on product chemical composition and used by UK and Netherlands offshore hydrocarbon exploration and production industry. The system uses this information and supports the United Kingdom and Netherlands governments in their commitment to the offshore industry strategy of OSPAR.

## Fish Health and Live Fish Movements – STARFISH

The System for Tracking and Recording Fish and Shellfish (STARFISH) system assists Cefas in carrying out its responsibilities in relation to disease control in the England & Wales fish farming industry. It provides a register of fish farms and businesses and monitors stock levels, production, movements, imports and exports.

- Manages the agreed schedule for inspections of fish farms.
- manages the inspectors' workload,
- generates pre-visit documentation and all correspondence
- records all samples taken by the inspectors
- Native iPad app for regulatory visits to fish farms, fully integrated with the main STARFISH database and application.

As part of a collaboration with the Environment Agency and National Resources Wales the STARFISH system has been enhanced for shared use in the management of issuing permits for wild fish sticks in England and Wales.



## Enquiries

For further information on Cefas Software Development, Hosting and Support, please contact Keith Winpenny on +44 (0) 1502 524428 or [keith.winpenny@cefas.co.uk](mailto:keith.winpenny@cefas.co.uk).