

Saving lives | Preserving nature | Enabling Government



World-leading management information and decision support platform to monitor and manage environmental and human challenges.



A world-leading decision support platform that drives improved monitoring and management of environmental challenges, EASOS was developed by a consortium of UK Industrial and Academic organisations led by the Satellite Applications Catapult as part of the UK Space Agency’s International Partnership Programme (IPP). The UK consortium worked with the Malaysian government to provide the knowledge and data to help preserve lives and protect resources. This created a decision support platform using a fusion of terrestrial and satellite data to address three environmental challenges: flooding, marine pollution and deforestation to reduce their social and economic impact.



EASOS is a **platform** designed to provide **high value decision** support to tackle country specific **environmental, security, and human challenges**. Through its intelligent way of **fusing data** from **terrestrial and satellite sources**, EASOS provides knowledge on a wide variety of topics to different government departments on a local, regional, and **international scale**.

Through EASOS, authorities have the potential to address major issues through a single platform, which is accessible through a secure web browser.

Rather than investing in a different system for every issue, the architecture of the EASOS platform allows for fast and flexible development of satellite based tools and applications tailored to each new specific issue.



Interoperability

multiple departments, agencies and bodies can work together in a secure environment



Automation

new data is automatically processed and analysed to deliver actionable insights 24/7



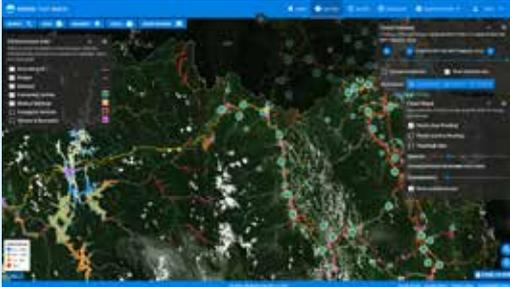
Alerts

intelligence gathered from terrestrial and satellite sources can generate alerts to assist in planning and decision making

EASOS is currently live with 3 applications for flooding, forestry and marine:



Flood Watch



EASOS Flood Watch is a state-of-the-art application capable of defining areas of a country at risk of flooding. Flood Watch generates alerts, forecasts flooding up to 7 days in advance, produces actionable information about impacted areas, and allows for more targeted operations by emergency planners. Ultimately, by providing advanced decision support, this enables a reduction in the number of fatalities, damage to personal property, businesses and infrastructure.



Forest Watch



EASOS Forest Watch is a state-of-the-art application which aims to reduce deforestation by enabling timely interventions of illegal logging, providing actionable intelligence and access to deforestation alerts. Forest Watch helps authorities to enforce forestry legislation and management practices to tackle the issue of deforestation. Forest Watch offers monitoring and detection of a change in national forest resources on a monthly basis to support better forest protection. In addition, it has the option for users to purchase more frequent and higher resolution satellite data to aid in the deployment of ground resources.



Marine Watch

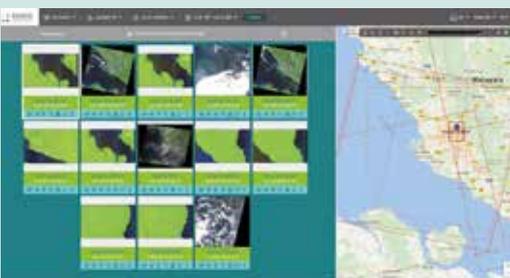


EASOS Marine Watch is a state-of-the-art application which assists in identifying incidents of marine oil pollution. The information available through the Marine Watch dashboard enables relevant authorities to identify, locate discharges and forecast marine oil pollution dispersal whilst identifying vessels that might be responsible.

EASOS Marine Watch helps reduce the financial impact of marine pollution with early warning of impact on the environmentally sensitive coastline. The application provides decision support for containment and cleaning efforts and enables a reduction in the loss of habitat and damage to marine life by deterring ships from pumping bilges off the coastline.



Data Discovery Hub



The data discovery hub is a tool included with the EASOS solution which enables the user to explore the data available in EASOS but also to view data that is available from external catalogues and commercial data providers. This portal is designed for users who want to investigate satellite data in more detail.



EASOS provides decision makers with the right information in a single dashboard, to assist in crisis planning, prevention and response. Currently live with solutions for flooding, forestry and marine, EASOS offers a long-term sustainable approach to meet a wide range of challenges.

Example applications that could be added:



Extractive Industries

Creating the balance between economic growth and environmental sustainability



Precision Agriculture

Enable proactive decision support to maximise yields



Transport Infrastructure

Planning, monitoring, and managing road, rail and air networks



Water Management

Understanding the balance between supply and demand



Smart Cities

Intelligent urban management and mobility



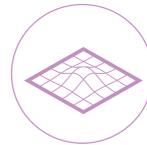
Subsidence

Observing and alerting of millimetric change



Coastal Monitoring

Protecting the environment and border security



Landcover

Mapping and monitoring change at a national level



Renewable Energy

Optimal planning for wind, solar and hydro power generation



Asset Management

Safeguarding critical national infrastructure

EASOS is only limited by the imagination of its end-users and can be easily extended to support more economic, environmental, security or sustainability issues.

To find out more please contact: enquires@easos.org.uk