

18/25 - Identifying Opportunities for Satellite Services among Organisations with Responsibilities for Monitoring and Managing Coastal Regions

The Satellite Applications Catapult is a not-for-profit company and one of a network of centres established by Innovate UK to accelerate the take up of emerging technologies. The Catapult is transforming the way the world uses satellite technology, enabling new business and improving people's lives. We are accelerating the growth of the UK space sector by: raising awareness and increasing demand for satellite-enabled services; making space technology more accessible and relevant; and helping businesses, entrepreneurs and innovators to overcome challenges and bring new products and services to market.

Working around the globe, the Catapult is bringing together multi-disciplinary and technical entities from government, industry and academic to deliver new innovative ideas and solutions for a variety of markets including agriculture, mining, transport, government services and maritime

Project Description

We are seeking an enthusiastic individual to help shape the future of our Blue Economy programme

The world's oceans and coastlines are an essential and valuable resource. The shipping industry, fisheries, tourism, the oil and gas sector all depend on the long-term sustainable development of the marine environment. 'Blue Growth' strategies to enable these sectors to thrive and support new opportunities in aquaculture, marine biotechnology and renewable energy must also protect this vital habitat.

In this vast ocean terrain, satellite services underpin the intelligence gathering requirements to support Blue Growth and are the critical infrastructure to deliver global connectivity. Satellites provide surveillance capabilities for maritime operations and fisheries, and environmental data to support development and enable us to monitor the impact of these activities on marine habitats.

Our Blue Economy Programme identifies and creates opportunities to embed satellite technology and data into services and solutions that enable sustainable Blue Growth. Our role is to understand the challenges faced by those working in this environment, raise awareness of satellite capabilities, and work in collaboration with potential customers and the wider satellite sector to develop innovative solutions. This will involve analysing and identifying key stakeholders with responsibilities for monitoring and managing coastal regions.

The role will entail the following tasks:

- Produce a briefing report and supporting evidence library based on open source material, supplemented with a limited number of phone interviews to key stakeholders to understand the dynamics and drivers of organisations responsible for managing the UK coastline.
- Identify and profile the key organisations with various roles and responsibilities in the management of economic and environmental activities along the UK coastline. Include government bodies such as the Environment Agency, Crown Estate, Maritime Coast Guard Agency, heritage agencies and Local Authorities et al. as well as major enterprises such as water companies, port owners and their primary suppliers.
- Describe the operational relationships and interdependencies of the various bodies engaged in managing coastal activities. Activities will include inter alia

- Economic – e.g. Port, Harbour and Marina Operators; Civil Engineering; Dredging Infrastructure Owners; Tourism and Heritage Management; Aquaculture and Fisheries
- Environmental – Flood and Sea Defence Management; Habitat management
- Identify current geospatial data usage and determine purpose, frequency and granularity of data sets. Also identify method of data collection and analysis. Where possible identify current suppliers of information both commercial and public service.
- Undertake a gap analysis to identify which data sets would be beneficial to the organisations managing various coastal activities but are currently not used. Determine the reasons for the gap, e.g. cost, technical issues or quality etc.
- Identify and outline opportunities for UK space companies to provide commercial data and analysis services. Provide evidence to develop business cases for the provision of coastal monitoring services using satellite data fused with additional sources of information.

Applicant Specification

- An understanding of three distinct areas would be useful 1) geospatial data 2) business development and 3) coastal activities. This would suite a geographer doing business studies or vice versa.
- Curiosity is important and an ability to pursue leads generated from one source to new areas of activity or information is essential. An inquisitive attitude is essential to understand how this complex and dynamic environment functions.
- Excellent written and spoken English

Preferred Additional Requirements

- Understanding of the many activities and issues that occur along coastal regions. An interest in a marine biological science might be useful.

Further Details

The Catapult has already developed a database of many of the organisations responsible for UK Coastal Management and their associated data requirements. However, this information needs to be carefully collated and extended.

The Catapult will also brief the candidate on types of data currently available from satellites and provide access to technical expertise.

Closing Date

Wednesday 16th May

Interviews

Week commencing 21st May

The Nitty Gritty

8 weeks fixed term contract to be agreed with successful candidate but nominally with a start date around 18 June which is also the SPIN Induction day at Harwell. Salary is £1,500 per calendar month.