Linking Satellites with Robot-subs

The National Oceanography Centre (NOC) is to form part of the Centres of Excellence in Satellite applications. As part of this new centre the NOC will develop the technologies to help robot-subs use live satellite data to inform their route through the ocean, not unlike how drivers use live traffic updates. These new centres are co-funded by the UK Space Agency and were set up in response to growing interest in how satellite data and technologies are helping businesses generate new ideas and solutions to grow.

The opportunities offered by the new Marine Robotics Innovation Centre in Southampton for collaborating with the marine robotics industry will be an important factor in the success of the centres aims. For example, the Innovation Centre enables companies developing command and control software for the robot-subs to collaborate with those developing the sensors and batteries in order to develop a complete working system for communicating with satellites – which is the aim of the new Centre of Excellence for Satellite applications.

By allowing the robot-subs to avoid storms or directing them to sites of scientific interest, such as algal blooms, these technologies will enable more effective exploration of the ocean. Working with The University of Portsmouth who are the lead partner, as well as the Universities of Southampton and Brighton, Marine South East, the Offshore Renewable Energy Catapult and Hampshire County Council, the NOC will form part of the south coast Centre of Excellence for the Satellite Applications Catapult. Satellite remote sensing and communications now play a particularly important role in the marine sector, which the south coast has recognised expertise in.