Scientists join forces to push Britain forward in new space race

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Experts in satellite monitoring of the Earth's climate and ecosystem are to pool their talent to observe changes on the planet.

Scientists at the Universities of Surrey and Reading will work with colleagues at the National Physical Laboratory (NPL) in the new collaboration called Global Satellite Sensing (GLOSS) - a world leading Centre of Excellence to monitor changes to the Earth, its ecosystem and climate.

Working together with the Satellite Applications Catapult, the Centre aims to contribute to the UK Government's drive to capture at least 10% of the predicted global space market of $400bn by 2030.

The aim is to develop ways of using the very latest advances in the new generation of small, lightweight and highly innovative satellites, being developed in the UK.

GLOSS will provide new satellite data services for meteorological purposes and use in disaster scenarios, as well as proving a wide range of services to commercial sectors, including energy resource management, urban and environmental monitoring, security and insurance industries.

Keith Robson, Director Enterprise and Growth at the University of Surrey, said: "Bringing these world-leading research capabilities together within a single centre of excellence provides the UK with an unrivalled ability to provide expertise across a range of areas.

"This includes everything from developing new low cost sensors, designing groups of small satellites that can work together which are called 'swarms', in-orbit calibration systems, data assimilation, data processing and visualisation.

"The Centre's aim is to ensure the UK plays a key role in the exploitation of new sophisticated Earth Observation services which will be in increasing demand as the cost of putting satellites into orbit falls dramatically over the next decade."

Professor Robert Gurney, Director of Space and Earth Observation at the University of Reading, which has the largest research capability in weather and climate science and earth observation of any university in Europe, said: "This centre provides a unique opportunity for scientists and engineers to work collaboratively on research with the potential to deliver breakthrough technologies and applications for a changing planet.

"British scientists are among the best in the world at using data from

satellites to provide vital information about weather and climate. By helping to develop the next generation of satellite technology, this collaboration will help to expand the range of information available to businesses and industry, such as real-time data. Such crucial and affordable information will help to give British businesses the cutting edge, boosting innovation and economic growth."

Stuart Martin, CEO at the Satellite Applications Catapult, added: "We are excited to be working with the academic community in this new initiative. This new Centre of Excellence will provide important links to a wide range of sectors including water, oil and gas, financial services, transport and telecom."

Provided by University of Reading