

Space partnerships sans frontières

Terri Freemantle and Ray Fielding outline a strategic two-year, £32 million international partnership programme, initiated and led by the UK Space Agency

UK satellite data and cutting-edge space technology play an ever increasing role on the international scene, both in the economies of established and emerging space nations. In furthering this process and spearheaded by the UK Space Agency, the International Partnership Space Programme (IPSP) was launched late last year to develop opportunities and generate sustainable relationships between UK businesses and international partners.

In the UK, we take for granted the services we receive as a result of space infrastructure, e.g., obtaining a weather forecast, planning a journey, managing a business online, or accessing data at the touch of a button. However, for many in emerging economies, basic services such as a communications infrastructure or local mapping are simply not available.

Satellites often provide the only communications option in many countries, particularly in areas such as sub-Saharan Africa. In addition, environmental monitoring from space can make a valuable contribution in managing resources and responding to environmental catastrophes. Satellite remote sensing can also support longer term climate mitigation and adaptation programmes.

Inspiring generations to come

Space also has the potential to inspire the younger generation - regardless of background - to dream of jobs as scientists or engineers. The IPSP will help build in-country capacity and capability to undertake research and innovation that tackles societal and environmental challenges and leads to economic growth.

The programme includes collaborative efforts to provide MSc. and PhD-levels of education to UK and international students. The anticipated knowledge exchange will subsequently facilitate continued collaboration between the UK and the international community, and open-up a world of opportunity for generations to come.

Two IPSP calls have been launched, providing grants to more



“This programme will help our international partners to take advantage of British expertise in satellite technology, services and scientific research. Today’s funding will give even more UK companies the chance to work on these kinds of exciting projects so that more people can enjoy the considerable economic and social benefits that new space technologies provide.” - Greg Clark MP, currently Secretary of State for Communities and Local Government

and formerly Minister for Universities and Science in the last Government, announcing funding for the IPSP during a visit to Airbus Defence & Space in Stevenage last November.

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than 17 different UK companies. These will enable UK space sector companies to develop international partnerships that provide benefit and deliver a return to the UK as well as partner nations.

Wide-ranging projects

The projects span a wide range of activities, from the delivery of tel-eoms services via low-cost CubeSats, to e-finance solutions for rural and remote areas, and from monitoring and taking action on illegal fishing and logging, to accessing maternal health advice in remote locations. Disaster response and critical infrastructure mapping are foreseen as other project activities.

IPSP-funded projects will demonstrate how UK satellite or space technology can provide societal and economic benefits to other nations, either through developing an indigenous capability or, alternatively, by providing services. It will also open up new avenues of dialogue and generate opportunities for UK industry to operate with established space-based economies.

The Satellite Applications Catapult is already involved in a number of IPSP projects in Mexico, Australia and Chile. The aim is to use its neutral position to help deliver innovative solutions to international issues and foster growth in the space industry, both at home and abroad.

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In a programme co-funded by the IPSP and the Mohammed Bin Rashid Space Centre (MBRSC) in the United Arab Emirates, the MBRSC and Deimos Space UK Ltd are proceeding with Project ‘SAFIY’ (Smart Application for Feature extraction and 3D modelling using high resolution satellite Imagery).

The project will use DubaiSat-2 and Deimos-2 high resolution optical Earth Observation data to monitor and detect changes in vegetation, water, road networks and buildings in support of the Dubai “smart government” initiative.

Pictured above: Yousuf Hamad Al Shaibani, Director General, MBRSC with David Parker, CEO of the UK Space Agency and Philip Davies, Managing Director of Deimos Space UK Ltd. Photo: Government of Dubai