News story: UK technology at the heart of successful launch

Credit: Earth-i.

The Hook and Loop Hold Down and Release Mechanism was used during the launch of CBNT-2, Earth-i's pre-production prototype satellite of its upcoming satellite constellation.

The new commercial constellation — called Vivid-i — will be the first of its kind to provide full-colour video; and the first European-owned constellation able to provide both video and still images.

The multiple satellites within the Vivid-i Constellation will significantly increase the ability of companies and institutions to monitor, track and analyse activities, patterns of life and changes at any location on earth.

The Hook and Loop Hold Down and Release Mechanism was funded by the UK Space Agency's National Space Technology Programme with a £35,000 grant and developed by Surrey Satellite Technology Ltd. It is a new type of release mechanism which uses the dual lock type of Velcro to hold down and release the solar panels of the satellite.

Dr Graham Turnock, Chief Executive of the UK Space Agency, said:

"Today's launch is a significant moment for the UK and global space industries with Earth-i's progress being tracked across the world. Earth-i is an exciting and innovative British company and is a fine example of our thriving space sector.

"The Government's recently published Industrial Strategy set out a clear vision for the UK to become the world's most innovative nation and we are working with industry to capture 10% of the global space market by 2030."

The prototype satellite, designated CBNT-2 by manufacturer Surrey Satellite Technology Limited (SSTL), was launched on the Polar Satellite Launch Vehicle from the Sriharikota rocket launch centre operated by the Indian Space Research Organisation, located in South East India, at 3.58am GMT.

CBNT-2 is a technology demonstration mission, operated by SSTL, and will be referred to as VividX2 by the Earth-i team.

It will demonstrate and prove technology and processes for Earth-i's forthcoming constellation including tasking, data downlinks to ground stations, image quality and the complex motion control systems that enable the spacecraft to capture video from space.

At the heart of the new satellite is an Ultra High Definition (UHD) camera which will capture high-resolution images for any location on Earth — and

film up to two minutes at a time of video which can show moving objects such as vehicles, vessels and aircraft.

Find out more about the UK Space Agency's <u>National Space Technology</u> <u>Programme.</u>