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FOR IMMEDIATE RELEASE:

PassivSystems wins SEHTA grant to develop groundbreaking remote healthcare technology

New sensors' ability to detect a heartbeat will revolutionise telecare

Newbury – Smart home technology firm [PassivSystems](#) has won a grant from the [South East Health Technology Alliance](#) (SEHTA) to test new electric potential sensors developed by the [University of Sussex](#), evaluating their suitability for remote healthcare provision. If the sensors stand up to PassivSystems' robust testing they could be used to help people live independently in their homes for longer, as the sensors could monitor occupancy in a room and even whether someone's heartbeat has changed.

The grant was awarded by the [International Centre of Excellence in Telecare](#) (ICE-T) division of SEHTA, which helps to facilitate the profitable and sustainable growth of companies in South East England's health technology sector. PassivSystems was chosen for its ability to develop new technologies and bring them to market, as SEHTA Chief Executive Officer [David Parry](#) explains:

"Remote telecare can play a crucial role in helping people to remain in their homes longer rather than going into care, but current Passive InfraRed (PIR) sensors require movement to detect a person's presence and cannot easily differentiate between multiple people in a room, offering limited value for assisted-living. The sensors developed by the University of Sussex have incredible potential but require further commercial and technical expertise to unlock that potential, which is where PassivSystems can help."

The University of Sussex has developed a new class of patented non-invasive (non-contact) electric potential sensor that can potentially exceed the capabilities of existing sensor technology. The ultra high impedance electric field probe is able to produce high quality signals from the heart with no resistive contact to the body. This means the probe can also be used to detect brain, nerve fibre and muscle signals, as well as detecting and differentiating between people's presence in a room.

The idea of occupancy is at the heart of PassivSystems' vision for automated, smart homes and the company is about to launch the first in a series of smart home platforms, [PassivEnergy](#). This is a home energy management product and PassivSystems will subject the University of Sussex sensors to the same rigorous levels of testing faced by PassivEnergy.

"The remote care possibilities these sensors open up are breathtaking, but we need to really put them through their paces to ensure they work as well in the home as they do in the lab," said [Fraser Harding](#) - Development Director, PassivSystems. "The initial performance tests will be conducted at

PassivSystems' HQ but we want to get these in the home as soon as possible to run real-life tests on them."

The key to unlocking the potential of the sensors is the PassivHub, the brains of PassivEnergy. With the right sensory inputs PassivHub can determine whether an elderly person has got out of bed as easily as it can control the central heating. It also makes it more straight forward to introduce homecare to people that might not be comfortable with it, as PassivCare can be introduced as simply another application that runs alongside PassivEnergy.

"PassivHub has been designed for a variety of smart home applications and we are hopeful that once the sensors are configured to work with it we will see a genuine breakthrough in the provision of remote healthcare," continued Fraser Harding. "The capability for a relative to receive a message if a loved-one's heart rate drops below a certain level is incredible and will provide the carer with the required reassurance whilst retaining the independence of the inhabitant."

The [University of Kent](#) is also involved in the project, helping PassivSystems with the evaluation of the sensors and providing social services advice on remote sensing options.

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About PassivSystems: www.passivsystems.com

PassivSystems Ltd was established in 2008 and aims to be the leading provider of Home Energy Management Systems. Bringing together specialists from two normally separate sectors, energy and telecoms, the PassivEnergy Home Energy Management System has been designed to help people reduce wasted energy, increase comfort and save money. The system is due to be launched in Q2 2010 and has been designed to be simple to install and easy to use.

PassivSystems was one of ten companies chosen by UK Trade & Investment in January 2010 to be part of an exhibition of Britain's best new technologies at the world's largest consumer electronics show, CES. PassivEnergy was showcased to thousands of journalists from across the world and named as one of the top gadgets on display. In February 2010 PassivSystems was selected to participate in the Clean and Cool Mission 2010, which saw 19 leading UK clean tech companies spend a week in San Francisco taking part in a range of activities designed to help them open up their business to the US market.

About SEHTA: www.sehta.co.uk

The South East Health Technology Alliance (SEHTA) is a company limited by guarantee, owned by its core members. It was launched in 2005 as an initiative by industry representatives supported by the regional development agency, SEEDA.

SEHTA's mission is to facilitate the profitable and sustainable growth of companies in South East England's health technologies sector – pharmaceuticals, biotechnology, medical devices and diagnostics. We will do this through leadership, influence, facilitation and signposting.

Our vision is to become the largest and most respected health technology network in Europe.

SEHTA acts as a central meeting point for the region, offering access to information, contacts, business support, and specialist business development services.

About ICE-T

ICE-T provides support and seed funding to projects developing innovative telecare products and services and facilitate the formation of collaborative project consortia. ICE-T develops new sustainable business opportunities by identifying and understanding user need, through open innovation and facilitated workshops.