ʹ¬ Α Ρ W A V E S

Swedish satellite industry pioneers to develop next-gen low-cost LEO terminal – win Vinnova innovation grant

Swedish public innovation agency, Vinnova, has awarded a SEK 4 million development grant to a Swedish project group aimed at boosting development of a next generation, low-cost LEO (Low Earth Orbit) satellite terminal. The award is part of the Vinnova's *Electronic components & systems - research and innovation projects 2021*.

The project group, led by <u>Satcube</u> and including Chalmers University of Technology, <u>Gapwaves</u> and <u>Forsway Scandinavia</u>, have joined forces to develop a benchmark satellite terminal featuring dramatically lower cost, size and weight compared to existing LEO offerings.

As the most important cost driver for a highly cost-efficient terminal is the antenna, the collaborators will focus primarily on developing a benchmark planar Ka-band antenna array, assessing features such as electronic / mechanic beam steering, gap waveguide technology and receive-only architecture.

Market scenario and drivers

As a broad playing field of organizations and leading satcom providers are currently deploying LEO satellite constellations, many leading industry proponents believe these initiatives can be an important force in reducing current global digital divide, tapping the ubiquitous provision of satellite broadband coverage based on new cost-effective satellites.

Solving a key challenge: Existing LEO end-user satellite terminals are expensive, hindering mass market adoption - particularly in economically less developed rural areas where incomes and resources are relatively low. Developing a robust, low-cost satellite terminal will be key to driving change.

For further project details, please contact the Project Manager, Lukas Nyström, Satcube AB, +46 702 791 070, <u>lukas.nystrom@satcube.com</u>.

Media contacts:

Satcube Udani Pettersson Business Developer <u>Udani.pettersson@satcube.com</u> Mob: +46 761851143

Forsway Leslie Johnsen Communications Director Leslie.johnsen@forsway.com Mob: +47 41458043

Chalmers University of Technology

Ashraf Uz Zaman Associate Professor, Department of Electrical Engineering <u>zaman@chalmers.se</u> Phone: +46 31 7721794

Gapwaves

Lars-Inge Sjöqvist, CEO Gapwaves AB lars-inge.sjoqvist@gapwaves.com Mob: + 46 736 84 03 56 About the project participants:

Satcube AB

Satcube is a world-leading developer of portable satellite terminals and services, to enable high-performance broadband in a minute to empower people at work. Satcube Ku, our GEO terminal, has since its launch in 2017 been deployed by clients all across the globe.

Chalmers University of Technology

The University conducts research and education in technology and natural sciences at a high international level. With 3,100 employees and 10,000 students, it offers education in engineering, science, shipping and architecture.

Gapwaves AB

Gapwaves originates from research at Chalmers University of Technology. Gapwaves' vision is to be the most innovative provider of mm-wave antenna systems and the preferred partner to those pioneering next generation wireless technology.

Forsway Scandinavia AB

Forsway's highly innovative hybrid hardware and technology combines satellite with existing terrestrial technologies enabling broadband services for the large demographics of users in underserved markets lacking reliable internet access. Learn more at www.forsway.com.