Press release from Gapwaves AB (publ)

Gapwaves invited to speak at ETSI's conference on environmental requirements for 5G

Gapwaves chief technology officer Thomas Emanuelsson will speak about energy efficiency and the advantages with Gapwaves technology at ETSI's conference on environmental requirements for 5G in France 23 November. ETSI (European Telecommunications Standards Institute) produces globally applicable standards for information and communication technologies within fixed and wireless communication.

ETSI's conference on environmental requirements for 5G will provide a platform for discussion among all relevant parties including policy makers, standardization bodies, vendors, operators and researchers on environmental matters related to 5G. The conference is about how standardization of 5G shall be formed to regard the environmental impact in general and energy efficiency in particular. Central for the conference is to create consensus around the environmental requirements that have to be taken into account in the standardization of 5G and to contribute to the development of coming standardization.

Gapwaves has been invited by ETSI's program committee to present our technology and how it can contribute to a better environment and lower energy consumption. Telecommunication represents ca 3% of the world's energy consumption and by using today's technology for transmission of data at 5G-speed, the energy consumption would increase considerably. Gapwaves technology, built on long-time research at Chalmers University of Technology, means one can construct low loss waveguide structures without compromise manufacturability, leading to high performance at reasonable cost. Low losses lead to reduced energy consumption and increased system performance. At the high frequencies required for 5G, it is vital to maintain reach without increasing the power input. The technology also enables a directed antenna beam towards the individual user. Active antennas for 5G built on Gapwaves patented technology exhibits all these features in simulations.

"For 5G to become reality it is absolutely essential to address the question regarding energy consumption. Using today's technology and increase the effect is not possible as energy consumption, the environmental impact and thereby the cost would be too high. Gapwaveguide technology, which is is the basis for Gapwaves active antennas, is a direct solution to that problem" says Thomas Emanuelsson, CTO at Gapwaves.

"We are very pleased ETSI has observed our technology and the advantages it provideds regarding energy efficiency. By participating in the conference we hope to be able to affect the standardization of the future's 5G-networks" says Lars-Inge Sjöqvist, CEO at Gapwaves.

For more information about the conference please see: http://www.etsi.org/news-events/events/1217-towards-setting-environmental-requirements-for-5g

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For further information please contact CEO Lars-Inge Sjöqvist.

Lars-Inge Sjöqvist, CEO Tel: +46 (0)736 84 03 56 E-post: lars-inge.sjoqvist@gapwaves.com

About Gapwaves AB

Gapwaves AB originates from research conducted at Chalmers University of Technology and was founded in 2011 to commercialize inventions for efficient wireless communication. The exponentially increasing use of data in our mobile devices creates an increasing demand for high performance wireless systems. For these systems, Gapwaves AB develops waveguide and antenna products based on the patented so-called GAP waveguide

technology. The company's markets are e.g. telecom radio links, automotive radars, surveillance systems, and space observatories.

Gapwaves shares (GAPW B) are traded on Nasdaq First North Stockholm and G&W Fondkommission is appointed Gapwaves AB's Certified Advisor.