AmmbrTech Announces Collaboration with Technical University of Catalonia (UPC)

CAMBRIDGE, UK, March 8, 2018 /EINPresswire.com/ -- AmmbrTech has entered a long term strategic collaboration agreement with the Technical University of Catalonia (UPC), a global leader in research in the area of wireless mesh networks and distributed systems. The collaboration will address several key research challenges related to mesh deployments at scale, integration of blockchain in mesh networks, economic and sustainability models, governance models, decentralised edge computing, and, finally, integration of Internet of Things (IoT) in mesh networks. Ammbr Research Labs, the research and development (R&D) arm of the AmmbrTech Group will carry out the R&D with UPC, in close collaboration with the guifi.net community network; guifi.net is the largest community network in the world, with more than 34,000 nodes connecting more than 100,000 users in Catalunya. The network combines wireless links and meshes, including optical fiber backbone and FTTH.

As part of the key R&D activities, several pilot trials will be carried out in Barcelona in the guifi.net community. The pilot will test the first complete implementation of the Ammbr network in a production-quality network. The pilot will also include a field test, at scale, of the edge computing capabilities of the Ammbr mesh network. A further pilot deployment trial is also planned in Antwerp. There are plans to extend the Ammbr network to be connected to the The Things network (a LoRaWAN IoT network) in Barcelona.

Extensive research activities surrounding the economic and governance models for the Ammbr network will also be carried out in the forthcoming months. The work is underpinned by the ongoing work with the Internet Society and the netCommons H2020 research project on different economic and governance models for networking infrastructures and services under different socio-economic conditions in urban and rural areas of developing and developed regions. These models will help define a range of economic and governance models, among others, to be supported by the Ammbr ecosystem.

Prof. Leandro Navarro, director of the UPC research group, and Research Director of Ammbr Research Labs sees this collaboration “as a unique opportunity to apply and integrate the efforts and lessons of so many networking activists, developers, practitioners, researchers, many experimental and stable networking infrastructures in the last 10-20 years. Given this accumulated experience, we expect AmmbrTech to deliver consolidated, integrated, robust, self-organized, socially and economically sustainable solutions to enable universal access to high speed broadband for all.”

According to Dr. Arjuna Sathiaseelan, CEO of Ammbr Research Labs, “The AmmbrTech group is committed to solve the universal affordable connectivity problem. As part of our commitment, Ammbr Research Labs was established to carry out cutting edge R&D to address the key research challenges in providing universal connectivity as well as establish strategic academic partnerships to carry out joint R&D activities. We are deeply excited to partner with Prof Navarro’s team at UPC (who has also been appointed as the Research Director at Ammbr Research Labs) to carry out joint R&D that would help define the Ammbr technology platform. Prof Navarro and his team have been in the forefront of carrying out pioneering research work in community wireless mesh networks and distributed systems and their close association with guifi.net and several community networks around

the globe gives us an unique opportunity to work together in co-designing and successfully piloting our Ammbr network across these communities.”

About UPC
The Distributed Systems research group (DSG) at UPC does research in community networks and community clouds since 2011, under a strategic partnership with the guifi.net Foundation. Among other, DSG operated the Community-Lab testbed for Community Networks, developed and maintains the Cloudy software for community clouds, deployed in guifi.net in Barcelona. Research in the group has contributed to the development of software like the QMP distribution for mesh routers, or the BMX7 routing protocol, among others. The group has produced many peer-reviewed publications about characterization, algorithms, systems, organizational models, etc in these areas.

About AmmbrTech
AmmbrTech is a distributed technology group, headquartered in Luxembourg, with subsidiaries and operations in the United States, United Kingdom, Ireland, Belgium, Switzerland, Singapore and Hong Kong. The Ammbr Foundation licensed AmmbrTech to develop key technologies for the Ammbr Mesh Network. For more information about AmmbrTech, please visit www.ammbrtech.com.

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