"Energy-Efficiency of Mobile Networks (GreenTouch)"

Ulrich Barth, Bell Labs, Alcatel-Lucent

GreenTouch is a consortium of leading Information and Communications Technology (ICT) industry, academic and non-governmental research experts dedicated to fundamentally transforming communications and data networks, including the Internet, and significantly reducing the carbon footprint of ICT devices, platforms and networks.

The Mobile Communications Working Group in GreenTouch contributes research to improve the energy savings of the wireless access network. These savings will accrue with innovations in architecture, access nodes, and deployment of the mobile communication network for future generations. Ulrich Barth, the chair of this Working Group will present an overview about the activities and the current status of the work.

The talk also presents the models and methodology to measure and compare the energy efficiency of nationwide mobile networks. Results will be shown that compare a reference scenario based on 2010 technology and traffic volume with a potential 2020 scenario including energy saving technologies from Earth and GreenTouch assuming 2020 mobile traffic pattern.