

GREENCOM – A Vinnova project for improving mobile wideband forest applications

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Greencom is a short multi discipline, multi partner VINNOVA sponsored project with the goal to improve coverage and wireless wideband for the Green Industry, i.e. Forestry, Prospecting, Farming and Reindeer breeding. The main partners are Wireless@KTH (project owner), Skogforsk (including StoraEnso and Sveaskog, other Forestry Companies as well as Harvesting Vehicle manufacturers), Chalmers, SP, ReQuTech, Smarteq, Nordisk Mobiltelefon (AINMT).

Greencom is a one-year project. The existing national 450 MHz network 'ice.net' forms the framework as the platform for the project. The main track forward is to make wave propagation characterizations inside the forest to add new knowledge on the actual situation for mobile terminals on board or outside vehicles. The next step is to use the mentioned wave propagation knowledge to design and propose antenna/modem solutions for improved performance on short and long-term basis.

This presentation will focus on intermediate results regarding 450 MHz wave propagation inside forests, first phase design of vehicular antennas as well as roadmap for the future. The ambition behind the presentation is to stimulate further research and product development in the area.