

Reuse of existing antenna in Swedish Weather Radar modernization.

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The Swedish weather radar network with 12 Ericsson Weather Radar will be modernized during 2014-2016 to modern Dual Polarized radars. The software at the central site at SMHI in Norrköping will also be replaced. The modernization that will start during this fall will reuse the existing antenna, pedestal and transmitter. The modernization will be done by Saab AB with EEC as main sub-contractor.

We knew that the Ericsson antenna was rather good. The question was if it was good enough to fulfil the requirements in the AI. A cost effective modernization could be done if we could fulfil the requirement with a reuse of existing antenna.

I will present measurements of the performance of the antenna rebuild to a Dual Polarized antenna. Measurements has been done with two antennas both at Saab AB test site AMPA in Arboga and at EEC test site in Enterprise. I will show that the antenna fulfil very demanding requirements concerning low side lobes, high antenna gain, similar antenna gain in H and V and very good cross polarization isolation.