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Conformal Antennas
Inventory of the On-going Research

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Abstract

The deliverable D6 represents a first step for structuring the research on conformal antennas, dispersed in several European universities and industrial Research centres. The inventory of the on-going research covers both the software and hardware activities, and it will help in defining most useful antenna architectures & geometries and in organizing students/Ph.D exchange between various European academies and companies.

When designing conformal antennas it is convenient to use specialized programs for specific conformal geometries that are fast and often more accurate than general electromagnetic solvers since they explicitly take into account the antenna geometry. Therefore, a detailed description of the developed software packages for analysing conformal antennas is presented. The developed arrays covers most-interesting types of conformal antennas, and they will be used as conformal benchmarking structures to judge antenna software tools on its performance. This will help in selecting proper software for some particular problem, and in integration of different software tools.

Keyword List

Conformal antennas, phased arrays, analysis methods, mathematical modelling, beam-forming, beam-steering.