



ACE - Antenna Centre of Excellence

Activity 1.2 Antenna Measurement Techniques and Facility Sharing

Objectives

The complexity of modern antennas makes antenna measurements an indispensable part of the development of any wireless communication or sensing system. Europe already possesses a strong expertise in antenna measurements and a number of advanced test facilities. However, the tremendous increase of wireless communication and sensing technologies now presents the field of antenna measurements with several new and significant challenges. The purpose of this ACE Activity is to facilitate the co-operation and integration of European expertise in antenna measurements to consolidate and develop this expertise to meet these challenges.

Results

Work Package 1.2-1: European Antenna Expertise Mapping

A WWW-based database has been established to map more than 30 European antenna measurement facilities. This serves as a means for the ACE consortium to identify activities where co-ordination and integration will be of benefit. Furthermore, it will serve as a means for users of antenna measurements from the wireless communication industry to establish contact with antenna measurement facilities.

Work Package 1.2-3: Facility Sharing – Feasibility Study

A programme has been initiated for the sharing of existing antenna measurement facilities. This serves to increase their capability to undertake measurements for external customers and to support ACE antenna research and development activities.



Work Package 1.2-2: First Facility Comparison Campaign

A comparison of 6 European antenna measurement facilities has been initiated with a 12GHz reference antenna. This serves to determine and compare the capabilities of different measurement techniques and to provide input to the standardisation of procedures for validation of antenna measurement facilities.



Work Package 1.2-4: Recommendations for Procedures

The development of *best practice* recommendations has been initiated for antenna measurement procedures in the two important areas of near-field measurements and smart antennas. This serves to ensure that the interest of European measurement expertise and facilities be reflected in new international standards.

Participants

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- Helsinki University of Technology, Finland
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- France Telecom R&D, France
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