



FP6-IST Network of Excellence



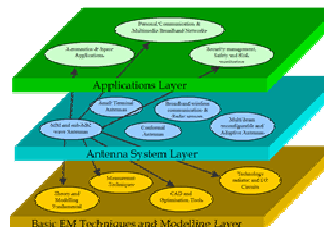
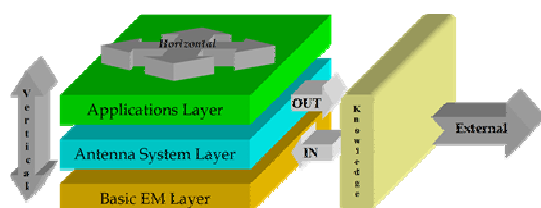
Information Society
Technologies

ACE - Antenna Centre of Excellence



Project acronym : ACE	Contract type : NoE	Total budget : 7.019.000€ (EC Contribution : 5.400.000 €)
Project name : Antenna Centre of Excellence	Start date : 01/01/2004	Researchers: 266
Project URL : www.ist-ace.org	End date : 31/12/2005	Action lines : Mobile and wireless system beyond 3G
Project reference : IST-2004-508009	Project duration: 24 months	Clusters : SB3G, Broadband for All

Structuring Efforts



Joint Programme of Activities

Horizontal Activities

Antenna software tools: to list the existing software for Antenna Design and make comparisons between them by using test examples; to select groups of software to be integrated and made available with documentation and support.

Antenna measurements and facility sharing: to list the available test ranges, their capabilities and performance; to obtain reference test objects to be used for test facilities evaluation; to optimise and standardise test procedures.

Training and education: to offer courses for doctor's degree combining the best available in Europe; to make available on the Web Antenna e-Learning; to improve the usage of the educational material already available in Europe.

Dissemination and knowledge transfer management: to spread knowledge, by Conferences and Workshops, towards users and industry; to establish suitable partners co-operation with organisations within and beyond the network.

Virtual Centre of Excellence: to create an Internet Portal focused on Antenna Research; scientific information, educational material, reports from the ACE activities, links to all ACE Participants well as software, will be available.

APPLICATION THEMES	Communications and networks: Fixed Wireless Communications & Multimedia			
	GMES	Mobile and Personal Communications & Multimedia - Mobile Broadband Systems	Aeronautics Equipment, Navigation and Space Communications	Space Communication & Multimedia
APPLICATION SECTORS	Observation of the Earth / People safety	Atmospheric remote sensing Space exploration Anti collision radars LMDS	Mobile Wireless Communication Navigation (Galileo, Aeronautics)	Broadband wireless communications Radar sensors (ground penetrating, imaging) Space Communication & Multimedia Terrestrial Wireless Base-station Aircraft automatic landing
Joint Research Programme	A2.1 MM & Sub-MM Wave Integrated Antennas	A2.2 Small Terminal and Smart Antenna Systems	A2.3 Wideband and Multiband Antennas	A2.4 Planar and Conformal Arrays
ACE Activities				
Integrating Activities				
A1.1 - Antenna Software Tools				
A1.2 - Antenna Measurements and Facilities Sharing				
A1.3 - Virtual Centre of Excellence				
Spreading Activities				
A3.1 - Training and Education				
A3.2 - Dissemination and Knowledge Transfer Management				
Management Activities				
A4.1 - Technical Management and Coordination				
A4.2 - Contractual Management				

Vertical Activities

MM- & sub-mm waves/Integrated antennas:

- Active integrated antennas
- Passive mm and sub-mm antennas
- Benchmarking manufacturing facilities
- Design and test of mm and sub-mm/Integrated antennas

Small terminals and smart antenna systems:

- Small terminal antenna technology
- Benchmarking of measurement facilities
- Advanced, reconfigurable MIMO transceivers
- System level smart antenna strategies

Wideband and multiband antennas:

- Wideband & multiband radiators
- Reflector surface models
- Antennas for surface penetrating radars

Planar and conformal arrays:

- Optimisation of active antennas architecture
- Beam-forming techniques
- Structuring research on conformal antennas

Participants

1 IDS Ingegneria dei Sistemi Spa	Italy	24 Universitat Politècnica de Catalunya	Spain
2 Katholieke Universiteit Leuven	Belgium	25 Universidad Politécnica de Madrid	Spain
3 Danmarks Tekniske Universitet	Denmark	26 Universidad Politécnica de Valencia	Spain
4 TICRA Fond	Denmark	27 Chalmers Tekniska Högskola AB	Sweden
5 Teknillinen Korkeakoulu	Finland	28 Ericsson Microwave Systems AB	Sweden
6 Alcatel Space	France	29 Swedish Defence Research Agency	Sweden
7 France Telecom SA	France	30 Kungliga Tekniska Högskolan	Sweden
8 Societe D'applications Technologiques De L'imagerie Micro-Onde	France	31 Saab Ericsson Space AB	Sweden
9 Thales Airborne Systems	France	32 Lunds Universitet	Sweden
10 Université De Marnes La Vallée	France	33 Ecole Polytechnique Fédérale de Lausanne	Switzerland
11 Centre National de Recherche Scientifique	France	34 Netherlands Organisation for Applied Scientific Research - TNO	The Netherlands
12 Institut National des Sciences Appliquées de Rennes	France	35 Bae Systems (Operations) Limited	UK
13 Technische Universität Darmstadt	Germany	36 The University of Birmingham	UK
14 Deutsches Zentrum Für Luft- Und Raumfahrt E.V.	Germany	37 University of Bristol	UK
15 IMST GmbH	Germany	38 The University of Liverpool	UK
16 Universität Karlsruhe	Germany	39 ASC Antenna System Consulting	Denmark
17 ICCS of the National Technical University of Athens	Greece	40 Lucent Technologies Network Systems UK Limited	UK
18 Università degli Studi di Roma "La Sapienza"	Italy	41 Telecommunications Technological Center of Catalonia	Spain
19 Politecnico di Torino	Italy	42 University of Piraeus Research Center	Greece
20 Università degli Studi della Calabria	Italy	43 National Centre for Scientific Research "Demokritos"	Greece
21 Università degli Studi di Firenze	Italy	44 Groupe des Ecoles des Télécommunications	France
22 Università degli Studi di Siena	Italy	45 Instituto Telecomunicações	Portugal
23 Instituto Superior Técnico	Portugal		

Contacts

Network Co-ordinator

Dr. Bruno Casali

IDS Ingegneria dei Sistemi spa
Via Livornese 1019
56010, Pisa Italy
Tel: +39 050 3124 241
Fax: +39 050 3124 201
Email: b.casali@ids-spa.it

Technical Co-ordinator

Dr. Per Ingvarson

Saab Ericsson Space AB
Delsjoemotet
40515 Goteborg, Sweden
Tel: +46 31 735 4002
Fax: +46 31 735 4000
E-mail: per.ingvarson@space.se

ACE : www.ist-ace.org

ACE VCE: www.antennasvce.org