



# FP6-IST Network of Excellence



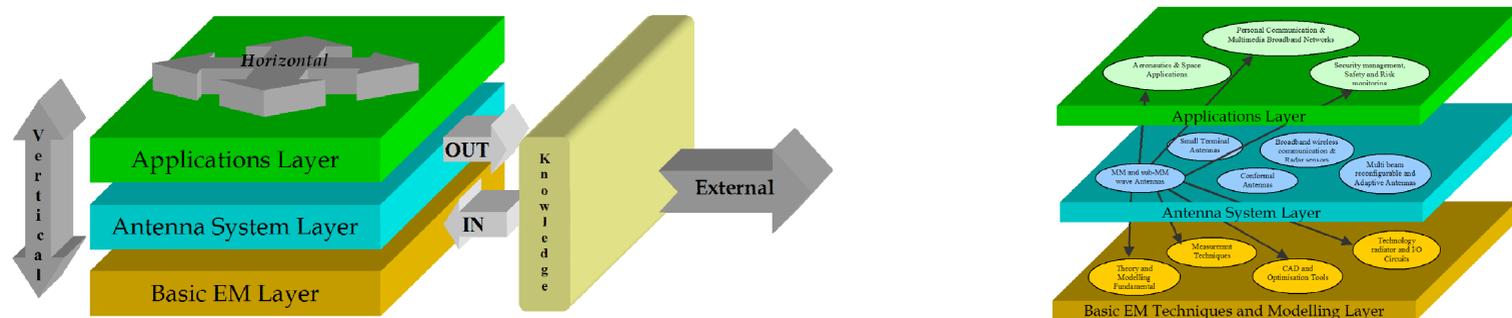
Information Society  
Technologies

## ACE - Antenna Centre of Excellence



<b>Project acronym :</b> ACE	<b>Contract type :</b> NoE	<b>Total Costs:</b> 13.534.000 € (EC Contribution : 10.500.000 € )
<b>Project name :</b> Antenna Centre of Excellence	<b>Start date :</b> 01/01/2004	<b>Researchers:</b> 384 (96 PhD) + 521 in ACE Community
<b>Project URL :</b> <a href="http://www.antennasvce.org">www.antennasvce.org</a> ; <a href="http://www.ist-ace.org">www.ist-ace.org</a>	<b>End date :</b> 31/12/2007	<b>Action lines :</b> Mobile and wireless system beyond 3G
<b>Project reference :</b> IST-2004-508009; IST-2006-026957	<b>Project duration:</b> 48 months	<b>Clusters :</b> SB3G, B4ALL, BAI

## Structuring Efforts



## Joint Programme of Activities

### Horizontal Activities

**Coordination with Wireless Applications;** to coordinate the Network effort with the external application Projects at National and European level.

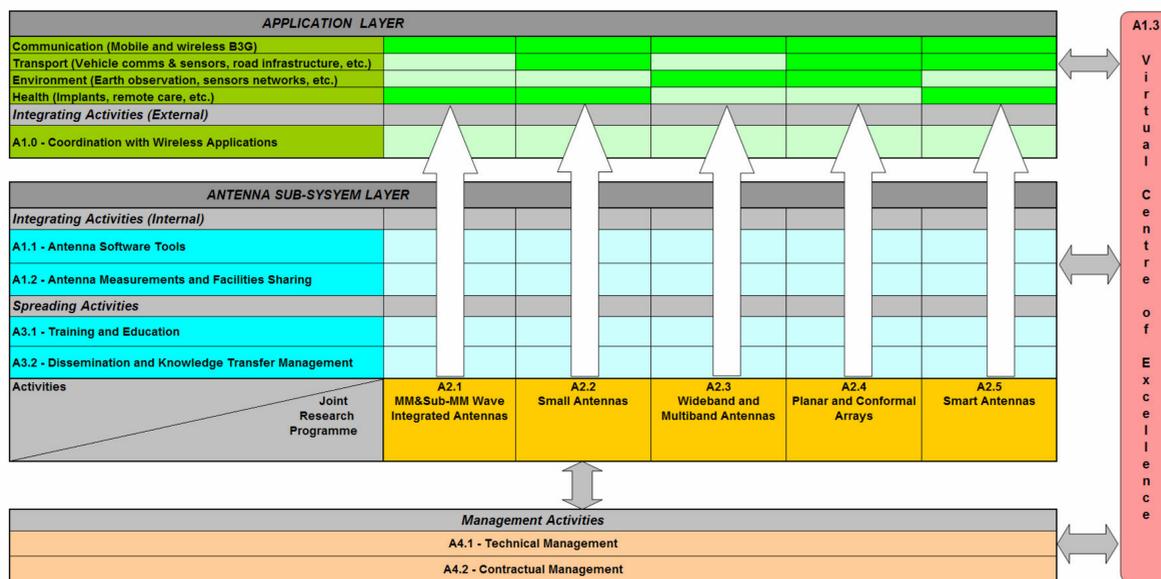
**Antenna software tools:** to list the existing software for Antenna Design and make comparisons between them by using test examples; to select groups of software to be integrated and made available with documentation and support.

**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.



### 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 antennas:

- 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

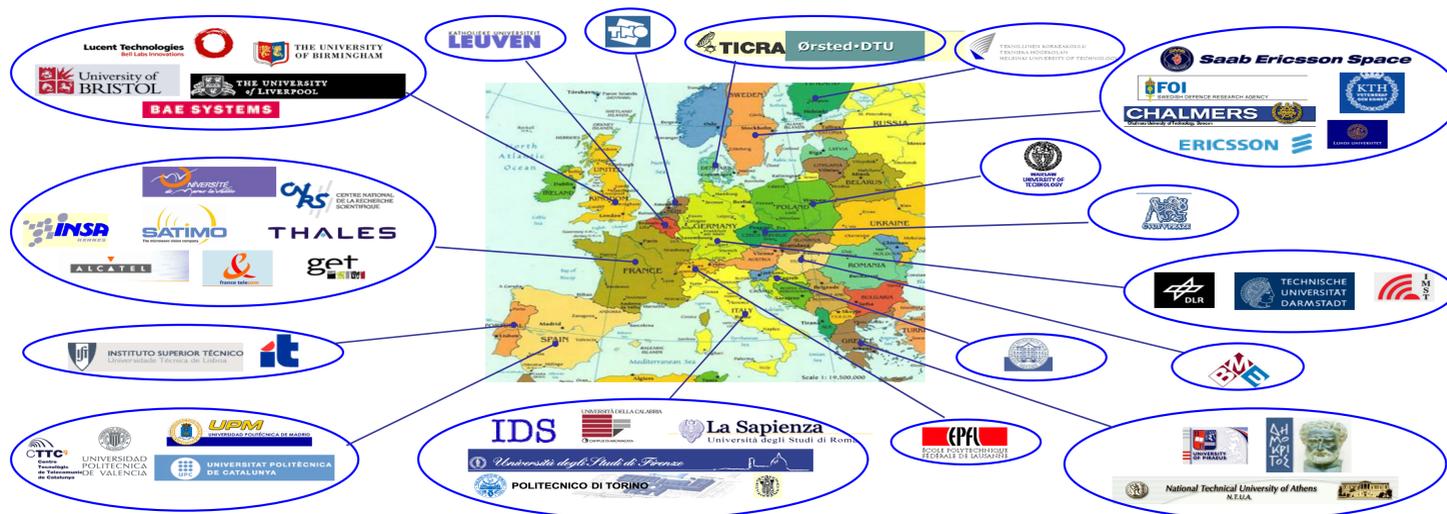
#### Planar and conformal arrays:

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

#### Smart Antenna Systems:

- Space-time processing for next generation wireless systems
- MIMO channel modelling
- Deployment issues and business models

## Consortium (51 Participants)



## Contacts

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