

AGH University of Science and Technology

Department of Telecommunications

WHO WE ARE?

AGH University of Science and Technology, founded in 1919, is ranked as one of the top Polish universities involved in research and education in information technologies. The University consists of 15 Faculties and employs about 2000 faculty members serving approximately 30 000 students within undergraduate, postgraduate and continuing education programmes.

The Department of Telecommunications is a part of the Faculty of Electrical, Automatic Control, Computer and Electronic Engineering, and is an important centre for education and research in communications technology.

COLLABORATION INTERESTS

- Partners for International Co-operation in the projects in Framework Programmes and other European Programmes
- Partners for joint research and exchange of researchers

RESEARCH AREAS

Major research areas of the Department of Telecommunications include:

- Network architecture and design (optical core and access networks, resilience and reliability of optical networks, control plane for transport networks etc.)
- Protocols for next-generation networking (quality of service in the IP environment, signalling and protocols for multimedia systems, IPv6, mobility and security);
- Wireless technology;
- E-services (digital video libraries, medical video servers, streaming services, digital video processing, intelligent database systems,

agent technology in databases);

- Development of seamless access to existing and emerging IP-based applications;
- Contribution to standardisation bodies, such as Internet Engineering Task Force and Internet Research Task Force;
- Architectures of mobile, broadband IPv6 networks, integration, 3G systems;
- Design, prototype and validate the necessary infrastructure and components for efficient distribution of services over diverse network technologies beyond 3G;
- Integration of the complementary network technologies to provide pervasive and user-centred access to broadband mobile services;
- creating an open development and run-time environment for SME to develop and to execute Networked and Distributed Mobile Systems and Services, using an Integrated Development Environment (IDE) and a common Framework;

REFERENCE PROJECTS

Since 1995 the Department of Telecommunications has been involved in European research projects within ACTS (BBL, BTI, BIDS), ICT (LION, MOBY DICK), Copernicus (MOCOMTEL, KNIXMAS) and Esprit programmes. Department of Telecommunications was also active in developing strategies and network planning for major Polish telecommunications operators. Professors and researchers of the Department served as consultants for network operators, equipment

vendors, and regulatory bodies in Poland and abroad.

European projects:

- **BBL** (1996-1999) BroadBand Loop (4FP, ACTS AC038)
- **BTI** (1998-1999) Broadband Trial (4FP, ACTS AC362)
- **MOBY DICK** (2000-2003) Mobility and Differentiated Services in a Future IP Network (IST-2000-25394)
- **DAIDALOS** (2004-2008) Designing Advanced network Interfaces for the Delivery and Administration of Location independent, Optimised personal Services (IST-2002-506997)
- **DESYME** (2005-2006) Development System for Mobile Services (Celtic Eureka, CP1-042)
- **OASIS** (2004-2007) Open Archiving System with Internet Sharing (Culture 2000)

WHAT MAKES US A GOOD PARTNER

- Experience
- International contacts
- Expertise
- High qualified team

OTHER INFORMATION

Contact person:
Professor Andrzej Pach, Ph.D. Hab
Head of the Department of
Telecommunications
Tel.: +48 12 617-39-37
Fax.: +48 12 634-23-72
E-mail: pach@kt.agh.edu.pl

