

### **Short Biography**

Costas Courcoubetis was born in Athens. He obtained his Electrical and Mechanical engineering diploma from NTUA (1977), the M.S. (1980) and Ph.D (1982) from the EECS department at the University of California, Berkeley. From 1982 until 1990 he was Member of Technical Staff in the Mathematics Research Center at Bell Laboratories, Murray Hill, NJ, and from 1990 until 1999 he was Professor in the Computer Science Department at the University of Crete at Heraklion. While in Crete he was Head of the Telecommunications and Networks Laboratory at the Institute of Computer Science of FORTH, and Director of the Network Management Center of the University of Crete. Since 1999 he is Professor at the Computer Science Department of the Athens University of Economics and Business and Director of the Economics and Theory of Systems Laboratory. In the past he was Visiting Lecturer at the University of California, Berkeley and Adjunct Professor at Columbia University and IMAG, Grenoble. His networking group while at ICS FORTH provided the initial funding and the technical staff of FORTHnet, a major Greek ISP, a spinoff of FORTH's wide area network.

### **Research Interests**

His current research interests focus on the economics of communication networks, grid and cloud computing, demand-response systems for smart grids, the performance and pricing of broadband networks and of the Internet, by combining tools from operations research, applied probability and computer science. He is also involved in regulation issues for telecommunications and the Internet, the design of auctions, and network cost models. His earlier interests included concurrency theory, formal methods and protocol verification.

The recent research results of the Network Economics and Services Group which he leads are in <http://www.nes.aueb.gr/>, and have been mostly achieved in the context of *participating in EU-funded projects* such as:

- M3I (development of a congestion pricing architecture for a self-managed Internet),
- MMAPS (economic models and incentive issues in P2P systems),
- GRIDECON (economic and business models for grid computing, design of a spot market for computation),
- BEINGRID (business experiments in grid technologies),
- TRILOGY (design of new solutions for the Internet control architecture),
- ETICS (economic and business models for network interconnection providing end-to-end quality of service),
- SESERV (socioeconomic services for European research projects),
- WATTALYST (Economic evaluation of sensor-based Demand/Response mechanisms in Smart Grids).

### **Publications**

He has over 100 publications in top scientific journals such as Operations Research, Mathematics of Operations Research, Journal on Applied Probability, IEEE/ACM Transactions on Networking, IEEE Transactions in Communications, IEEE Transactions in Automatic Control, IEEE JSAC, SIAM Journal on Computing, Stochastic Processes, Probability in Engineering and Information Sciences, Queuing Systems, ACM TOPLAS, JACM, Telecommunications Systems, Information

and Computation, Theoretical Computer Science, Formal Methods in System Design, and high quality refereed conferences like FOCS, STOC, INFOCOM, LICS, GLOBECOM, ITC, SIGMETRICS. His work has **over 9000 citations**, according to Publish or Perish (Google Scholar). He is a co-author with Professor R. Weber, Cambridge University, of the book "*Pricing Communication Networks: Economics, Technology and Modeling*" (Wiley, 2004).

He was **member of** the National Research Council, and Member of the Board of the Information Society SA. He has consulted in many occasions with the Greek FCC regarding the Local Loop Unbundling, the auctions for LMDS spectrum, and the methodology for imposing fines to Network Operators. He has also consulted with the Greek Energy Regulator in the design of auctions for selling the rights for importing power through the northern borders of Greece and also for the rights of guaranteed income from selling power to the daily market. Recently he consulted on issues related to deregulation of the electricity market. He has also consulted on many occasions with the Greek PTT (OTE) on issues related to the definition of the relevant markets, the cost-based pricing of services, and with Vodafone (Greece) on network cost models and auctions for procurement. He was from 2004-2008 the Consultant of the Greek Academy of Sciences in the area of networks and information systems.

He has given recently (2010-2011) **invited talks** in places like UC Berkeley, Caltech, and UC Santa Cruz. He was in the evaluation committee for INRIA and in the EIFFEL think tank for the future Internet architecture. He obtained the 2010 Test-of-Time Award by Springer Verlag, and the Best Teaching Award in Executive MBA, AUEB, 2002, 2004. The research project TRILOGY mentioned earlier obtained the 2011 Future Internet Award.

His **other interests** besides research include classical piano, serious swimming and gourmet cooking. He studied piano in Greece with Rena Kyriakou, at Berkeley in the music department and with Harald Logan, and also in New York in the Julliard Extension Division. Recently he obtained his artist diploma at the Nakas Conservatory in Athens, as a pupil of Alexandra Papastefanou.