



# NOMS 2008

IEEE/IFIP Network Operations and Management Symposium  
Pervasive Management for Ubiquitous Networks and Services

## Keynote Speeches Program

	Monday 7 April	Tuesday 8 April			Wednesday 9 April			Thursday 10 April			Friday 11 April
9:00 - 10:30	Tutorial & Workshops	Opening and Keynote			Keynotes			Technical Session 12	App. Session 3	Dissertation Digest 1	Tutorial & Workshops
10:30 - 11:00	Coffee break	Poster Session 1/Coffee break			Poster Session 3/Coffee break			Coffee break (10:40-11:00)			Coffee break
11:00 - 12:40	Tutorial & Workshops	Technical Session 1	Technical Session 2	Panel 1	Technical Session 7	Technical Session 8	Panel 3	Technical Session 13	Technical Session 14	Panel 5	Tutorial & Workshops
12:40 - 2:00	Lunch	Lunch			Lunch			Lunch			Lunch
2:00 - 3:40	Tutorial & Workshops	Technical Session 3	Technical Session 4	App. Session 1	Technical Session 9	Technical Session 10	App. Session 2	Technical Session 15	Technical Session 16	Dissertation Digest 2	Tutorial & Workshops
3:40 - 4:10	Coffee break	Poster Session 2/Coffee break			Poster Session 4/Coffee break			Coffee break			Coffee break
4:10 - 5:50	Tutorial & Workshops	Technical Session 5	Technical Session 6	Panel 2	Technical Session 11	Tools	Panel 4	Dist. Experts Panel & Closing Plenary			Tutorial & Workshops
					Tools demo (5:50 - 7:00)			Outrageous Opinion Session (5:50 - 7:00)			
	Welcome Reception (7:00 - 9:00)				Gala Dinner (7:00 - 10:00)						

### Tuesday, April 8, 2008

9:00 - 9:30

**Opening**

9:30 - 10:30

**Keynote Speech 1 - Roberto Saracco**

From Value Chains to Ecosystem: New Opportunities for Telecommunications and New Challenges for Managing Networks and Services.

### Wednesday, April 9, 2008

9:00 - 9:45

**Keynote Speech 2 - Dr. Ian F. Akyildiz**

Spectrum, Network And Operations Management in Cognitive Radio Networks

9:45 - 10:30

**Keynote Speech 3 - Dr. Luiz Fernando Gomes Soares**

Brazilian Terrestrial Digital TV System

**Keynote Speech 1 : From Value Chains to Ecosystem: New Opportunities for Telecommunications and New Challenges for Managing Networks and Services.**

**Tuesday, April 8, 2008 - 9:30-10:30**

Keynote Speaker: Roberto Saracco, Future Centre - Telecom Italia Lab (TILAB)

The world is getting flatter and flatter, hierarchies and structures leave way to way to mesh and mash ups. Value chains morphs into ecosystems. The impact on the biz is significant. What are

the new challenges that the management of networks and services have to meet?

In addition, ecosystems tend to have a much more dynamic sense of stability, their evolution is subtle in the short term but can be staggering in the longer term. And as they evolve they may overlap and this leads to dramatic changes in the way biz and supporting infrastructures are shaped. Words like pervasive and ubiquitous may assume a quite different connotation: no more something planned and directed from the center to the edges under the control of few actors, rather something happening as result of loosely related actions originating at the edges.

The talk will address the broad picture to stimulate thinking on the direction for the next steps, both in fixed and mobile infrastructures as well as in the changing paradigm of service creation and provisioning.

### Short Biography

College degree in Computer Science, University degree in Math, PhD in Physics. Joined Telecom Italia in 1971 contributing to the development of the first SPC system in Italy. Through the years he worked on Data Transmission, Switching, Network Management.

In the last 10 years he has worked on the economic side of telecommunications, creating and directing a research group at the Future Centre in Venice. He is currently responsible for Trends and Long Term research in Telecom Italia and co Chair of the Edge-Core group of the Communications Future Program of the MIT.



Senior member of IEEE-COMSOC, he has served in many roles, including TC Secretary, NM Chair, VP Membership Relations. He is currently COMSOC Director for Sister and Related Societies. He received the Salah Aidarous Award in 2005 for his contribution to network management and the 2007 Donald McLellan Meritorious Service Award for his contribution to strengthening the Communications Society presence worldwide.

### Keynote Speech 2 : Spectrum, Network And Operations Management in Cognitive Radio Networks.

Wednesday, April 9, 2008 - 9:00-9:45

Keynote Speaker: Dr. Ian F. Akyildiz

Today's wireless networks are characterized by a fixed spectrum assignment policy. However, a large portion of the assigned spectrum is used sporadically and geographical variations in the utilization of assigned spectrum ranges from 15% to 85% with a high variance in time. The limited available spectrum and the inefficiency in the spectrum usage necessitate a new communication paradigm to exploit the existing wireless spectrum opportunistically. This new networking paradigm is referred to as cognitive radio networks. In this talk, the novel functionalities and current research challenges of the cognitive radio networks are explained in detail. More specifically, an overview of the cognitive radio technology is provided and the network architecture is introduced. Moreover, the cognitive network functions such as spectrum management, spectrum mobility and spectrum sharing are explained in detail. The influence of these functions on the performance of the upper layer protocols such as routing and transport are investigated. Moreover, the network management, operation and maintenance problems are highlighted and open research issues in these areas are also outlined.

## Short Biography

IAN F. AKYILDIZ is the Ken Byers Distinguished Chair Professor and Director of Broadband and Wireless Networking Laboratory at School of Electrical and Computer Engineering at Georgia Institute of Technology since 20 years.



Professor Akyildiz is Editor-in-Chief of Computer Networks (Elsevier) Journal, and Ad Hoc Networks (Elsevier) journal. Professor Akyildiz is an IEEE Fellow (1995), an ACM Fellow (1996). He received several IEEE and ACM Awards including IEEE Leonard Abraham Best paper award from IEEE JSAC in 1997, IEEE Best Tutorial paper award in 2003, IEEE Harry Goode Memorial Award (IEEE Computer Society), 2003 ACM SIGMOBILE award for his pioneering contributions in mobility and resource management in wireless networks, ACM Best Distinguished Lecturer Award in 1994, Georgia Tech Faculty Research Author Award in 2004 and School of ECE/Georgia Tech Distinguished Faculty Award in 2005.

Dr. Akyildiz guest edited several special issues and organized many leading conferences such as IEEE INFOCOM 1998, IEEE ICC 2003, ACM MOBICOM 1996 and 2002 and many others. His current research interests are Wireless Sensor Networks, Next Generation Wireless Networks and Interplanetary Internet.

## Keynote Speech 3 : Brazilian Terrestrial Digital TV System.

Wednesday, April 9, 2008 - 9:45-10:30

Keynote Speaker: Dr. Luiz Fernando Gomes Soares

Brazil has recently launched its terrestrial digital tv system. The system is based on a reference model that differs from others counterparts by using most recent and advanced technologies. This talk aims to briefly present this reference model, focusing predominantly on the main Brazilian innovation: the middleware called Ginga. Some design decisions with regards to the support offered to applications are discussed and then the middleware architecture is presented with more attention paid to its declarative environment. The talk finishes with a discussion about management issues raised by this new media service and their relationships with Ginga modules.

## Short Biography

Dr. Luiz Fernando Gomes Soares received a D. Sc. in computer science from PUC-Rio (Brazil) in 1983. He also holds a M. Sc. in computer science and an Electronic Engineer degree from PUC-Rio (1976 and 1979). Dr. Soares is a full professor in the Informatics Department at the Catholic University of Rio de Janeiro (PUC-Rio), where since 1990 he heads the TeleMidia Lab. He is a Board Member of the Brazilian Internet Steering Committee and Chair of the Middleware Working Group for the Brazilian Digital TV System. Prior to joining PUC-Rio he was a researcher at the Brazilian Computer Company. Other academic appointments include visiting professorships at École Nationale Supérieure de Télécommunications (France), Université Blaise Pascal (France), and Universidad Federico Santa Maria (Chile). He also spent two years in the IBM Scientific Center in Rio.

