



Managing Everything toward a Secure, Smart, and Hyperconnected World



IEEE/IFIP NOMS 2016 CALL FOR SUBMISSIONS

The 15th IEEE/IFIP Network Operations and Management Symposium (NOMS 2016) will be held 25-29 April 2016 at İstanbul Technical University, İstanbul, Turkey. Held in even-numbered years since 1988, NOMS 2016 will follow the 28 years tradition of NOMS and IM as the primary IEEE Communications Society's forum for technical exchange on management of information and communication technology focusing on research, development, integration, standards, service provisioning, and user communities. NOMS 2016 will focus on the theme "Managing Everything toward a Secure, Smart, and Hyperconnected World," presenting recent, emerging approaches, and technical solutions for dealing with future network and ICT infrastructures, as well as with novel services provided in smart and hyperconnected environments (e.g., smart cities, Internet of Things). NOMS 2016 will offer various types of sessions: technical, experience, demo, poster, panel, and dissertation. Topics of interest include, but are not limited to, the following:

Smart and hyperconnected environments

- Smart Cities
- Smart Grid
- Smart Homes
- Cyber-Physical Systems
- Internet of Things
- Social Networks
- Applications and case studies

Software-Defined Networking

- Advanced network virtualization
- Case studies and practical deployments
- Control plane programmability
- Data plane programmability
- Network functions virtualization
- Non-IP protocols
- Protocols, languages and frameworks (OpenFlow, Frenetic, OpenDaylight...)

Technologies enabling management

- Data, information, and semantic modeling
- Message and software buses
- Middleware
- Mobile agents
- Protocols
- Software engineering for clouds
- Software product lines
- Virtualization
- Web services

Security and security management

- Security aspects, principles, technologies, protocols for all other aforementioned topics
- Intrusion detection, intrusion prevention, intrusion response
- Network security
- Security for peer-to-peer and overlay networks
- Security for smart X
- Security for large systems and critical infrastructures
- Privacy and anonymity
- Vulnerability management
- Early warning

Network management & operational experience

- Ad-hoc networks
- Automotive and Vehicular Networks
- Big Data in and for management
- Broadband access networks
- Cognitive Radio networks
- Data Centers
- e-Maintenance
- Future Internet
- Heterogeneous networks
- Home networks
- M2M networks
- OSS/BSS development
- Overlay networks
- Personal area networks
- Sensor networks
- Wireless & mobile networks

Service management

- Business management
- Clouds
- Data center management
- Data service management
- Hosting
- Infrastructure as a Service, Management as a Service, Platform as a Service, Software as a Service
- IT service management
- Managed service provisioning
- Multimedia service management
- OTT service management
- Virtualized infrastructure management

Functional areas

- Billing
- Deployment
- Diagnostics, Tracing, Troubleshooting
- Fault management
- Energy-efficiency/green management
- Service Assurance
- Service Fulfillment
- Service Level Management
- Security Management

Methodologies for network operations and management

- Control theory
- Data collection and aggregation
- Data mining, Machine learning
- Design and simulation
- Economic/finance theories
- Experimental approaches
- Optimization theory
- Probability and stochastic processes, queuing theory
- Risk management
- Software engineering methodologies
- Visualization

Management approaches

- Autonomic and self-management
- Best practices
- Centralized management
- Distributed management
- Integrated management
- Management architectures
- Organizational aspects
- Policy-based management
- Process oriented management
- IT service management (ITSM)
- Process engineering and frameworks (ITIL, CobIT, RiskIT, ValIT)

IMPORTANT DATES:

Paper Submission: Sep 1, 2015

Notification of Acceptance: Nov 20, 2015

Camera Ready: Jan 15, 2016

General Co-Chairs:

Sema Oktug, *Istanbul Technical University, Turkey*
Mehmet Ulema, *Manhattan College, USA*

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