



## Call for Papers

The 17th IFIP/IEEE Symposium on Integrated Network and Service Management (IM 2021) will be held on May 17-21, 2021, in Bordeaux, France. Held in odd-numbered years since 1989, IM 2021 follows the 33 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.

IM 2021 will focus on the theme of **"Intelligent Management of Open and Highly Programmable Networks"**. It aims to capture recent results, emerging approaches and technical solutions for dealing with resilience and sustainability of network and service management in highly dynamic environments. Furthermore, the sudden and important uptake of work-from-home and the promise of the post-digital era are rising new challenges and exacerbating the dynamic nature of the communication infrastructure, pushing additional requirements on networks in terms of quality, resilience and sustainability. This is also accelerating the adoption of Artificial Intelligence advances along with the openness and programmability of network infrastructures, to make these more flexible and adaptive. In addition to this theme, IM 2021 will cover a wide range of topics of interest within the field in integrated network and service management. IM 2021 will offer five types of sessions: technical, experience, poster, panel and dissertation. High quality will be assured through a well-qualified Technical Program Committee and stringent peer review of paper submissions.

### Topics of Interest

Authors are invited to submit papers that fall into or are related to the topic areas that are listed below. In addition, we invite submissions of proposals for demonstrations, exhibits, technical panels, tutorials and workshops, as well as experience session papers and dissertation papers.

#### Management and Control of Networks

- Enterprise and Campus Networks
- Data Center Networks
- Industrial Networks and TSN
- Cyber Physical Systems
- IP Networks
- 5G/6G,
- Wireless & Mobile Networks, including optical, overlay, access, SCADA, IoT, VANET, etc.

#### Programmable Networks and Automation

- Software-Defined Networking
- Network Virtualization
- Network (Data, Control, Management planes) Programmability
- Network Slicing
- Management & Orchestration
- Network Functions Virtualization/Service Function Chaining
- Cloud Native Networking, DevOps, Network Automation, Zero-Configuration Networking
- Network Telemetry

#### Management and Control of Communication Services

- Information Technology Services
- Virtual Networking Services
- XaaS and Cloud Services
- Multimedia Services
- Content Delivery Services
- Social Networking Services
- Security Services
- IoT Services
- Network Resilience and High-Precision Networks

#### Management Algorithms and Architectures

- Centralized Management
- Distributed Management
- Autonomic Networks and Self-Management
- Management Protocols
- Fog and Mobile Edge Computing
- Lambda Functions and Elastic Management
- Data Analytics for Management
- Policy-Based Management
- Intent-Based Management
- Network Optimization

#### Management Functions and Practical Approaches

- FCAPS: Fault, Configuration, Accounting, Performance and Security
- Case Studies and Practical Experiences
- Business-Driven Management Services
- Measurement and Validation
- SLA Management, QoS and QoE
- Energy Management
- Deployment of Services
- Operations Support Systems

#### Artificial Intelligence Techniques for Network and Service Management

- Management with AI
- Markov Chains and Management
- Machine Learning and Deep Learning
- Management with Big Data
- Mobile Agents

#### Management Efforts for Pandemics and Crisis Situations (COVID-19)

- Contact and Activity Tracing
- Network/Service Management Support
- Network Measurements
- Network Adaptation
- Case Studies and Practical Experiences

Contact TPC Co-chairs for more information: [im2021tpc@gmail.com](mailto:im2021tpc@gmail.com)

Submission link: <https://submissoes.sbc.org.br/home.cgi?c=3614>

### Important Dates

Paper Submission Deadline: ~~September 20, 2020~~ → new deadline : October 04, 2020.

Notification of Acceptance: December 10, 2020

Camera-Ready Submission: January 29, 2021

### General Co-chairs

Toufik Ahmed, Bordeaux INP, France

Olivier Festor, University of Lorraine, France

### TPC Co-chairs

Yacine Ghamri-Doudane, La Rochelle University, France

Alberto E. Schaeffer-Filho, UFRGS, Brazil

Joon-Myung Kang, Google, USA