Cloud computing, networking, and their related service management including grid computing (as appropriate) have recently emerged out of marketing hype to viable computing/networking tools for reducing infrastructure deployment and service management costs without sacrificing the quality of service/experience (QoS/E).

Although the virtualization of computing and networking resources, and their self-organizing interconnection is at the heart of it, the methods/mechanisms/tools that are used to expose (visualization) resources and their utilization (the application programming interfaces of APIs) for developing anything (*) as a service (*aaS) are still ad-hoc and/or proprietary in nature. Security, privacy, and multi-tenancy support requirements add another dimension to the already complex set of Cloud — computing and networking — management problems.

This JNSM SI on CCNS management will include invited and referee-recommended papers on the following topics:

- **Cloud Applications and Services**
  - Any computing, data-storing, and networking as a service
- **API for enabling Cloud-based Services**
  - Public, Private, and Hybrid (toolkit approach) APIs
- **Virtualization (of any and all resources) and Hosting**
  - Virtualization of Clients/Desktop, Applications, Services, and Databases
  - Distributed Intra- and Inter-Domain Storage/FileSystems/Database
  - Distributed Intra- and Inter-Domain Scheduling of resources
  - Resources Mobility and Multi-tenancy
- **Protocols and Interoperability**
  - Adaptive Protocols for Generic Cloud Services
  - Inter-Domain Service-Specific Adaptive Protocols
- **Private, Public, Community, Hybrid Clouds**
  - Addressability, Networking Extensions, Service Quality Agreement
- **Cloud Service Logging and Monitoring**
  - Including Auditing and Verification
- **Soft and Hard Privacy and Security for Cloud-based Services**
  - Process, Practice and Mechanisms
- **Risk, Resiliency, and SLA (RRS) of Services in Clouds**
  - Risk-tolerance, MMTF, MMTR, etc. for Components and Apps/Services (End-to-End)
- **Cloud Service and Infrastructure Management**
  - Including Visualization, Automation, Debugging and Diagnosis
- **Reports from CCNS management Experiments and Field Deployments**
  - University, Consortia, Industry/Field Trials, etc.
- **Mobility Management in Cloud Computing**
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- Cloud service hosting mobility and service migration
- Elastic computing using mobile codes
- Policy management in Cloud computing
- Regulations and export control of using Cloud computing

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