

Call for Papers
Transactions on Emerging Telecommunications Technologies (ETT)
Special Issue on Integration of Satellite-Aerial-Terrestrial Networks

Aim and Scope:

With the rapid development of satellite, unmanned aerial vehicle, airship, balloon and cellular networks, the integration of satellite-aerial-terrestrial networks has increasingly attracted great research interest in the area of future networking. As an integrated system of satellite, aerial and terrestrial segments, the satellite segment is able to afford seamless connectivity in areas of rural, ocean and mountain, the aerial network can heighten the network capacity for tremendous service requests, while the terrestrial system can maintain high data rate access. Therefore, the integration of satellite-aerial-terrestrial networks is extremely significant in many realistic domains, including earth observation and mapping, intelligent transportation system (ITS), military mission, disaster rescue, etc.

Due to the inherent features of self-organization, heterogeneity, and time-variability, however, there are many challenges for the integration of satellite-aerial-terrestrial networks. First of all, self-organization characteristic causes issues such as cross-segments design, network security, and load balancing, etc. Furthermore, the dynamic time-varying feature affects propagation channel modeling, mobility management, traffic distribution, and routing mechanism, etc. Moreover, operation in the heterogeneous network must take into account cooperative data transmission, interconnection, and intercommunication, etc. Hence, there is a tremendous need for researchers and engineers to have a comprehensive knowledge of the latest advances in the integration of satellite-aerial-terrestrial networks, including challenges, enabling technologies, future trends and standardization efforts, especially in terms of satellite and aerial segments.

Topics of Interest:

The aim of this Special Issue is to present the state-of-the-art of the integration of satellite-aerial-terrestrial networks. Research papers that introduce challenges, enabling technologies, future trends and standardization efforts related to the integration, with an emphasis on satellite and aerial segments, are of high interest. Specifically, topics of interest include, but are not limited to:

- Architecture design and system integration
- Spectrum and channel allocation
- Handover and mobility management
- Routing protocol and algorithm
- Traffic offloading and data delivery
- Security, privacy and trust

- Quality of Service
- Cooperative transmission
- Cross-segments design
- Converged and future applications
- Satellite networking
- UAV, airship and balloon networking
- 5G technologies and 6G trends
- Future networking for Integration
- Standardization in Integration

Papers must be tailored to the integration of satellite-aerial-terrestrial networks. The editors maintain the right to reject papers they deem to be out of scope of this special issue. Only originally unpublished contributions and invited articles will be considered for the issue. The papers should be formatted according to the ETT guidelines

([http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1541-8251/homepage/ForAuthors.html](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1541-8251/homepage/ForAuthors.html)). Authors should submit a PDF version of their complete manuscript via Manuscriptcentral (<http://mc.manuscriptcentral.com/ett>) according to the timetable below.

Important Dates:

Manuscript Submission Deadline: February 1, 2020

Decision Notification: June 1, 2020

Final Manuscript Due: August 31, 2020

Publication Date: Q4, 2020

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