Call for Workshop Paper

2025 International Workshop on 4th Distributed and Integrated Communication, Sensing, and Computing in Space-Air-Ground Integrated Networks for 6G (DISCS)

24th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-2025)
November 14-17, 2025, Guiyang, China

Scope

In the relentless pursuit of advancing communication technologies, the convergence of space, air, and ground networks (SAGIN) has become a cornerstone of innovation, particularly as we transition into the 6G era, yet this transformation introduces profound network security challenges that demand immediate attention. While SAGIN promises unprecedented capabilities through the integration of communication, sensing, and computing across space-borne satellites, aerial platforms, and terrestrial infrastructure, its distributed and heterogeneous nature significantly amplifies vulnerabilities, making security an indispensable pillar of this evolving ecosystem. Critical security challenges include developing secure resource allocation mechanisms to prevent malicious resource exhaustion, implementing robust mobility and handover management systems to ensure uninterrupted, threat-resistant connectivity during transitions between network segments, designing security-aware QoS routing protocols to safeguard mission-critical data flows from eavesdropping and spoofing attacks, creating energy-efficient secure communication protocols that enforce encryption and authentication without compromising latency or power consumption, and architecting scalable, fault-tolerant network frameworks capable of withstanding quantum computing threats and other emerging attack vectors. Moreover, the unique security risks inherent to SAGIN's integration demand innovative solutions for data integrity and privacy protection, especially for untampered sensing data and user anonymity in edge-computing environments, as well as the establishment of zero-trust architectures and blockchain-based ledgers for validating nodes in decentralized networks. By addressing these multifaceted security challenges alongside traditional technical hurdles, researchers can help pioneer trustworthy SAGIN systems that enable a future where seamless connectivity and robust security coexist, empowering applications ranging from smart cities and autonomous transportation to immersive virtual environments with the resilience needed to thrive in an increasingly complex threat landscape.

Topics of interest include, but are not limited to:

- Integration of communication, sensing, and computing
- Distributed communication, sensing, and computing
- Edge computing in space-air-ground integrated networks for 6G
- Cooperative sensing in space-air-ground integrated networks for 6G
- Seamless integration mechanisms for satellite, UAV, and terrestrial networks
- Efficient resource allocation algorithms for heterogeneous communication, sensing, and computing resources
- Mobility management in heterogeneous networks
- Network security mechanisms in multi-domain communication scenarios

- QoS-aware routing and scheduling algorithms
- Spectrum sharing and cognitive radio technologies
- Automatic modulation classification technologies

Important Dates
- Paper submission deadline: 1 August, 2025
- Author notification: 5 October, 2025
- Final manuscript due: 20 October, 2025
- Registration due: in accordance with TrustCom 2025

Submission Instructions
All papers need to be submitted electronically through the conference submission website **https://edas.info/N34163** with PDF format. The length of the papers should not exceed 6 pages + 2 pages for over length charges. Manuscript Templates for Conference Proceedings can be found at: https://www.ieee.org/conferences_events/conferences/publishing/templates.html.
Once accepted, at least one of the authors of any accepted paper is requested to register the paper at the conference.

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