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## Towards Next Generation beyond 5G (B5G) Networks

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### Message from the Guest Editor

Dear Colleagues,

After the success of the first focused and standalone 5G trials, the beyond 5G (B5G) paradigm is becoming the mainstream of academic and industry-driven research in next-generation networks. Future B5G networks must be able to operate with massive small-cell deployments and end-to-end connectivity in support of heterogeneous use cases with very different requirements in terms of bandwidth, latency and reliability.

Cost-effective B5G networks will be achieved by integrating innovative small cells (e.g., LiFi) with other existing 5G technologies, and with different backhaul transport network solutions providing adaptive capacity on demand. Thus, transport network solutions at both the optical and packet layer should be based on key enablers such as pluggability and programmability. In addition, the control and orchestration of such complex network environments will demand solutions exploring zero-touch and intent-based networking paradigms.

- e2e connectivity
- Innovative small cells
- Optical-wireless integration
- Open programmable networks
- Zero-touch network control
- Intent-based networking
- AI-empowered network operation



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*Guest Editor*

**Special** Issue



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