

# IET Library Reading List: Communication Networks



These ebooks and ejournals, available via the [the IET Virtual Library](https://theiet.org/virtual-library), focus on the topic of communication networks, covering computing, fibre optics, and network design.

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## Ebooks (provided by EBSCO)

[Software Defined-WAN for the Digital Age: A Bold Transition to Next Generation Networking, David W. Wang \(2019\)](#). SD-WAN is an advanced networking approach that creates hybrid networks to integrate broadband or other network services, being capable of maintaining the performance and security of real-time and sensitive applications.

[Optical and Wireless Convergence for 5G Networks, Abdelgader M. Abdalla et al \(2020\)](#). Provides an inclusive survey of 5G optical-wireless requirements, architecture developments, and technological solutions.

[5G Technology: 3GPP New Radio, Harri Holma et al \(2020\)](#). A comprehensive guide to 5G technology, applications and potential for the future 5G brings new technology solutions to the 5G mobile networks including new spectrum options, new antenna structures, new physical layer and protocols designs and new network architectures.

[Design and Optimization for 5G Wireless Communications, Haesik Kim \(2020\)](#). Offers a technical background to the design and optimisation of wireless communication systems, covering optimisation algorithms for wireless and 5G communication systems design.

[Software Networks: Virtualization, SDN, 5G, and Security, Guy Pujolle \(2020\)](#). Second edition with five new chapters on the importance of open source software for networks, mobile edge computing, fog networking, tactile internet – a network environment allowing remote access, and security – the use of Cloud of security, secure elements and the emergence of the blockchain.

[LTE Advanced Pro: Towards the 5G Mobile Network, Frédéric Launay and André Perez \(2019\)](#). Presents LTE evolution towards 5G mobile communication and the emergence of new requirements for MBB, MTC and LLC services. Also discusses the need for LTE to support low-rate transmission and high-latency communication for MTC services.

[Threats and Opportunities of Chinese FDIs in the EU : A Discussion on Huawei Building the Fifth Generation of Communications Infrastructures \(5G\) in the EU, Alexander Kinzel \(2019\)](#). Discusses the threats and opportunities on Chinese FDIs in the race to construct the 5G infrastructure network in Europe.

## Ejournals (provided by EBSCO)

[Security and Communication Networks](#). Covers research on security and cryptographic mechanisms applied to all types of information and communication networks, including wired, wireless and optical transmission platforms.

[Journal of Network and Systems Management](#). Includes information on the architecture, analysis, design, standards, and migration issues related to the operation, management, and control of distributed systems and communication networks.

[International journal of communication systems](#). Provides a forum for research and development in the fast-growing area of communication networks.

[IUP Journal of Telecommunications](#). Topics include broadband communication systems, wireless communication networks, optical and satellite communications, digital signal and image processing.

[Mobile Information Systems](#). A source for mobile information systems research and development and serves as an outlet for facilitating communication and networking among mobile information systems researchers, practitioners, and professionals.

[Wired](#). Focuses on emerging technologies and their effect on society including communications, networks and security.

[Telecommunications Reports](#). Provides thorough coverage and in-depth analysis of the communications business.

[Telecommunication Systems](#). Covers all aspects of modeling, analysis, design and management of telecommunication systems.

[Mobile Networks and Applications](#). Includes information about the convergence of mobility, computing and information organisation, access and management.

[Journal of High Speed Networks](#). An archive for papers describing original results of lasting significance in both the theory and practice of high speed networks. Papers on original research, survey papers on topics of current interest, technical notes and more.

[Wireless Networks](#). Includes articles about research, experience and management issues of data networking, telecommunication, and integrated networks.

[Distributed Computing](#). Covers novel architectures of distributed systems and computer networks, communication protocols and hierarchies, distributed operating systems, verification and synthesis of distributed systems.

### Further resources from the IET

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