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SERIES J: CABLE NETWORKS AND TRANSMISSION
OF TELEVISION, SOUND PROGRAMME AND OTHER
MULTIMEDIA SIGNALS

Switched digital video over cable networks

Architecture and specification for radio over IP transmission systems

Recommendation ITU-T J.1107

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Architecture and specification for radio over IP transmission systems

Summary

As cable television (TV) networks migrate to deep fibre or fibre to the home (FTTH) architectures, it is now possible and easy to provide bidirectional high-quality media services that require very high-speed digital transmission of high-quality content. Cable TV networks provide services by transmitting radio frequency (RF) signals between the headend and a cable modem (CM). The configuration and devices of these networks are optimized for RF signal transmission. When migrating to all-fibre cable TV networks, changing the existing network devices to new network devices for service operators (SOs), who provide broadcasting and various data services through hybrid fibre coaxial (HFC)-based cable TV networks, is recommended. Therefore, a cost-effective solution for deployable and acceptable migration toward optic-based cable TV networks is required.

Recommendation ITU-T J.1107 provides a cost-effective adaptable solution for HFC-based cable TV network devices in optic-based cable TV networks. The purpose of the radio over Internet protocol (RoIP) system is to transmit data over cable service interface specifications (DOCSIS)-based upstream (US) RF signals of CM to cable modem termination system (CMTS) through IP transmission in optic-based cable TV networks.

History

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