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

Switched digital video over cable networks

**Functional requirements specification for
self-interference cancellation function of
in-band full-duplex in a HFC based network**

Recommendation ITU-T J.1110

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Functional requirements specification for self-interference cancellation function of in-band full-duplex in a HFC based network

Summary

Keywords such as ultra-high-resolution content delivery, end-to-end access service proliferation, high-speed transmission and broadband transmission are becoming the basic requirements that should be accommodated by network providers who are responsible for data transmission.

In particular, as various IoT services, personal media and cloud-based services gradually become common, there is a subscriber demand for a high data rate.

Cable networks are also undergoing various network evolution processes to develop and apply technologies that satisfy the requirements of the service ecosystem.

Currently, cable broadcasting networks have limited upstream frequency bands that can transmit data.

In order to overcome these limitations and enable symmetric upstream and downstream transmission, we are developing in-band full-duplex (IFDX) transmission technology that enables simultaneous transmission and reception in the same band. For the efficiency performance of the IFDX transmission technology, self-interference cancellation is one of the important factors, and Recommendation ITU-T J.1110 is focused on the functional specification of self-interference cancellation for the IFDX transmission system in a hybrid fibre coaxial (HFC) based network.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T J.1110	2021-06-13	9	11.1002/1000/14646

Keywords

IFDX

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.