

Cable networks for television signals, sound signals and interactive services —

Part 10: System performance for return paths

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British Standard

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National foreword

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 24 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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English version

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Réseaux de distribution par câbles pour
signaux de télévision, signaux de radiodiffusion
sonore et services interactifs
Partie 10: Caractéristiques des systèmes de
voie de retour

Kabelnetze für Fernsehsignale, Tonsignale und
interaktive Dienste
Teil 10: Rückkanal-Systemanforderungen

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European Committee for Electrotechnical Standardization
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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 209, Cable networks for television signals, sound signals and interactive services.

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The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1999-09-01
- latest date by which national standards conflicting with the EN have to be withdrawn (dow) 1999-09-01

Annexes designated “normative” are part of the body of the standard.

Annexes designated “informative” are given for information only.

In this standard, Annex B is normative and Annex A and Annex C are informative.

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1 Scope

1.1 General

Standards of EN 50083 series deal with cable networks for television signals, sound signals and interactive services including equipment, systems and installations

- for headend-reception, processing and distribution of television and sound signals and their associated data signals and
- for processing, interfacing and transmitting all kinds of signals for interactive services

using all applicable transmission media.

All kinds of networks like

- CATV-networks
- MATV-networks and SMATV-networks
- individual receiving networks

and all kinds of equipment, systems and installations installed in such networks, are within this scope.

The extent of these standardization work is from the antennas, special signal source inputs to the headend or other interface points to the network up to the system outlet or the terminal input, where no system outlet exists.

The standardization of any user terminals (i.e. tuners, receivers, decoders, multimedia terminals etc.) as well as of any coaxial and optical cables and accessories therefore is excluded.

1.2 Specific scope of this part 10

This standard is dealing with the transparent return path of cable networks operated in the frequency range between 5 MHz and 65 MHz or parts thereof. Higher frequencies may be used in fibre based networks.

NOTE In addition it is possible to use the frequency range from 0 to 5 MHz for return path transmissions, e.g. for NMS or other control, monitoring and signalling purposes. Applications below 5 MHz are not covered by this standard.

An active return path carries typically only return signals. A passive return path can be used for both return and forward signals.

This standard lays down the basic methods of measurement for signals typically used in the return path of cable networks in order to assess the performance of those signals and their performance limits.

All requirements refer to the performance limits which shall be obtained between the reference points (Figure 1) of the return path system.

One reference point is the network termination close to the subscriber. It is the last point where all forward and return signals are present and carried on the same cable. If no network termination point exists, the reference point is the system outlet.

The other reference point is the input of the return signal receiver (or transceiver). At this point the transparent signal path ends and behind this point the signal is treated in a non-transparent way. The return signal receiver can be situated at the headend but can also be at the node of the coaxial cell or at any other point of the network.

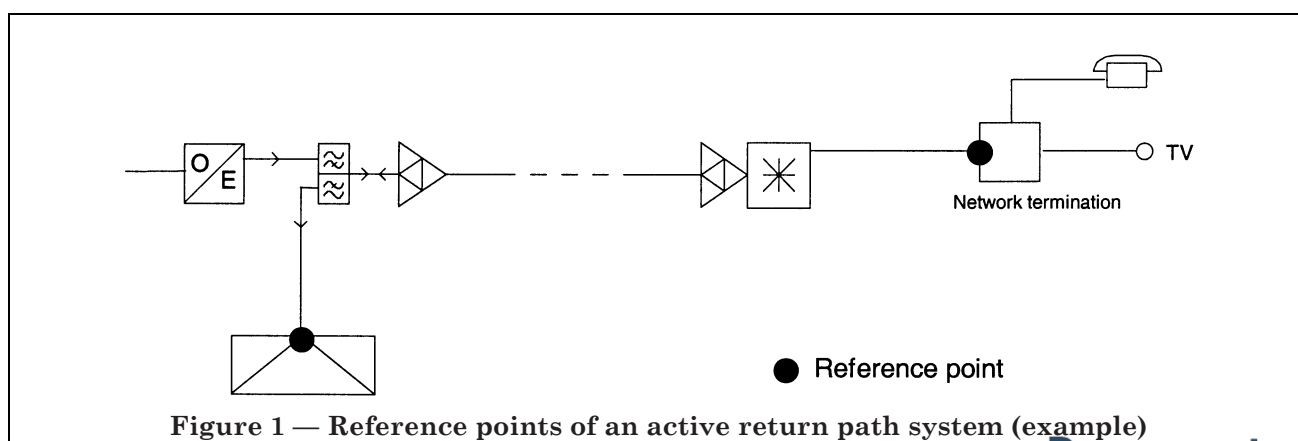


Figure 1 — Reference points of an active return path system (example)