



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

H.140

LINE TRANSMISSION OF NON-TELEPHONE SYSTEMS

A MULTIPOINT INTERNATIONAL VIDEOCONFERENCE SYSTEM

ITU-T Recommendation H.140

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation H.140 was published in Fascicle III.6 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

© ITU 1988, 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.



Documents

Document Sharing Hub

Recommendation H.140

A MULTIPOINT INTERNATIONAL VIDEOCONFERENCE SYSTEM

(Melbourne, 1988)

1 Scope

This Recommendation defines a multipoint videoconference system which enables three or more videoconference sites to intercommunicate simultaneously, provided that the codecs conform to Recommendations H.120 and H.130 (§ 1, Note).

Note – Codecs conforming to § 2 of Recommendations H.120 and H.130 are in principle also applicable.

2 General requirements

A multipoint control unit (MCU) is a piece of equipment located in a node of the network (terrestrial or satellite) which receives several (maximum seven) 2 Mbit/s channels from access ports (each access port corresponding either to a local or a remote codec, or to another MCU) and, according to a certain criterion, causes some of them called selected channels to be distributed towards the connected studios (see Figure 1/H.140).

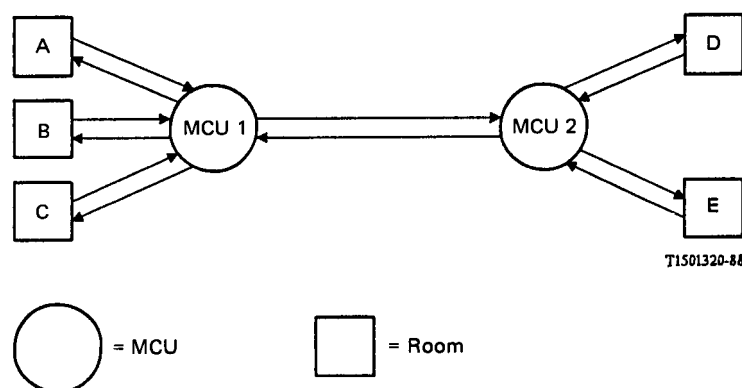


FIGURE 1/H.140
Use of MCU in a terrestrial network

The basic functions of the MCU for a terrestrial or a satellite network are identical. The MCU shall have the capability:

- To synchronise the incoming streams to a single 2048 kHz pilot clock.
- To extract frame alignment from TS0 in order to synchronise the different streams to the frame clock, to extract frame parity, multiframe and supermultiframe alignment from TS2 in order to access in each incoming stream the codec-to-codec signalling channel.
- To process this signalling channel.
- To process the sound channels in order to create an open sound system, in the case of an unencrypted system.
- To decide image switching and dispatching according to a selection criterion (automatic or on request).
- To signal in advance the switching decisions to the codecs so that degradation during and after the switching can be avoided.
- To multiplex the selected video channels with the open sound channel and the effective data channels.
- To distribute the reconstructed streams to the corresponding access ports.