



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

M.1015

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

**MAINTENANCE:
INTERNATIONAL LEASED CIRCUITS**

**TYPES OF TRANSMISSION ON
LEASED CIRCUITS**

ITU-T Recommendation M.1015

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation M.1015 was published in Fascicle IV.2 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.

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Recommendation M.1015

TYPES OF TRANSMISSION ON LEASED CIRCUITS

1 A leased point-to-point or multiterminal circuit can be provided in some instances for one type of service only, such as:

- telephony (that is, speech transmission),
- voice-frequency telegraphy,
- data transmission,
- facsimile.

(The list is not complete but it includes the most common types of service.)

2 In other instances leased circuits are used for different transmission purposes at different times, in which case the circuit characteristics should in principle be determined by the requirements of the more exacting form of transmission (when there is a difference in requirements).

Note – The North American expression for this type of operation is *alternate-use*.

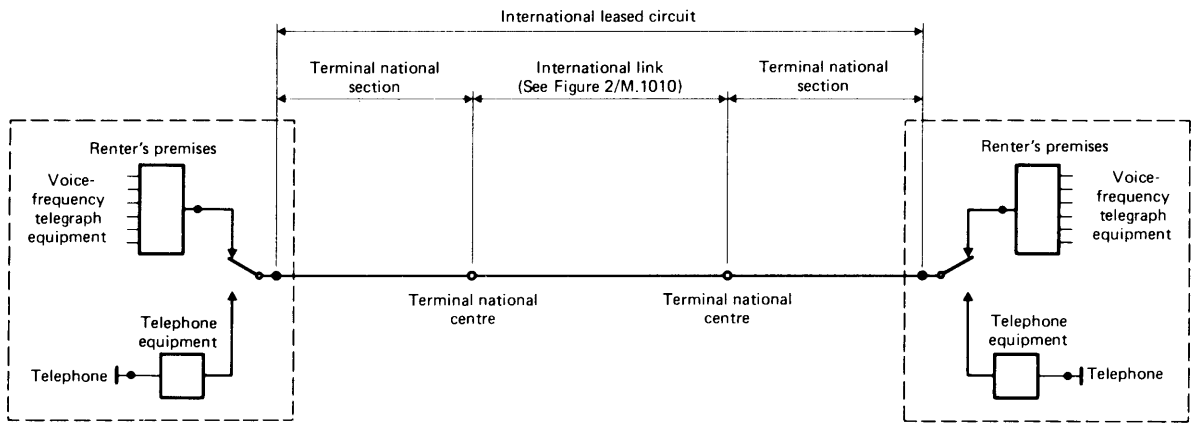
3 Although special quality leased circuits are not provided for normal telephony, it is recognized that they will be used for voice communication for service coordination purposes and for the *alternate-use* type of operation envisaged in § 2 above. The prescribed circuit limits in Recommendations M.1020 and M.1025 are not intended to define a circuit to be used to carry normal telephony, although a circuit which meets these limits will be adequate for voice communication purposes.

4 In some instances the bandwidth provided by the circuit is divided into two or more bands thus providing two or more circuits which may be used for different types of transmission.

If the band is divided among two or more classes of transmission by means of equipment under the control of the Administration, then band-dividing filters should wherever possible be used in preference to hybrid transformers because their use affords the possibility, in some circumstances, of carrying out maintenance operations on one circuit (obtained by frequency division) without affecting another.

In those cases in which the frequency division is effected by the renter's apparatus in the renter's premises the Administrations should make it clear that even though the renter's apparatus must be approved by the Administration, this latter is not responsible for faults or the wrong operation of equipment attributable to the arrangement adopted by the renter.

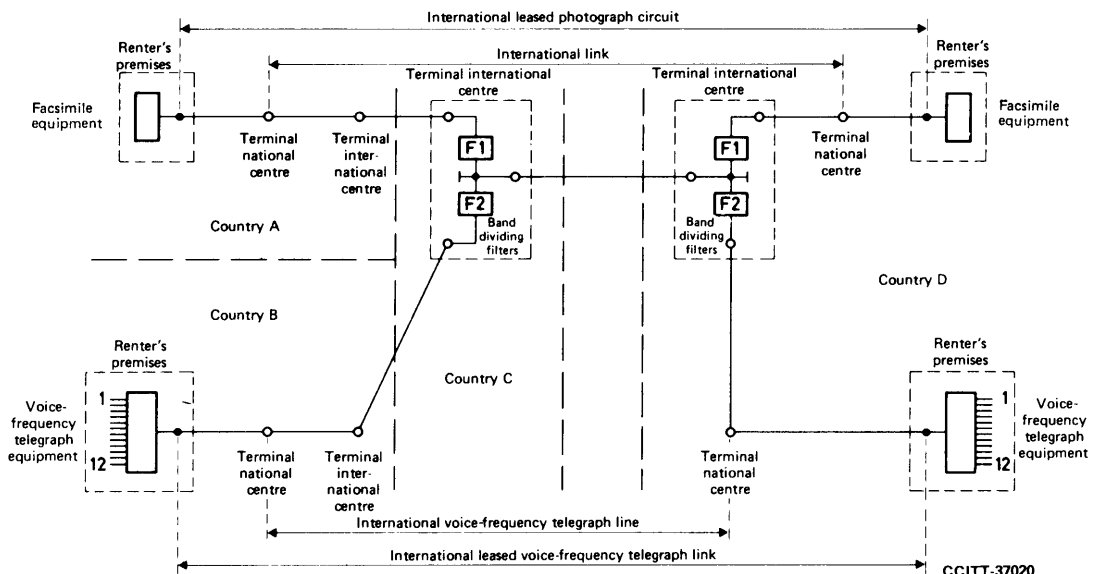
Figures 1/M.1015 to 3/M.1015 illustrate some typical arrangements.



CCITT-37012
d01-sc

FIGURE 1/M.1015

Example of a point-to-point leased circuit alternatively used for telegraphy or telephony



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d02-sc

FIGURE 2/M.1015

Example of a multipoint leased circuit for simultaneous voice-frequency telegraphy and facsimile transmission

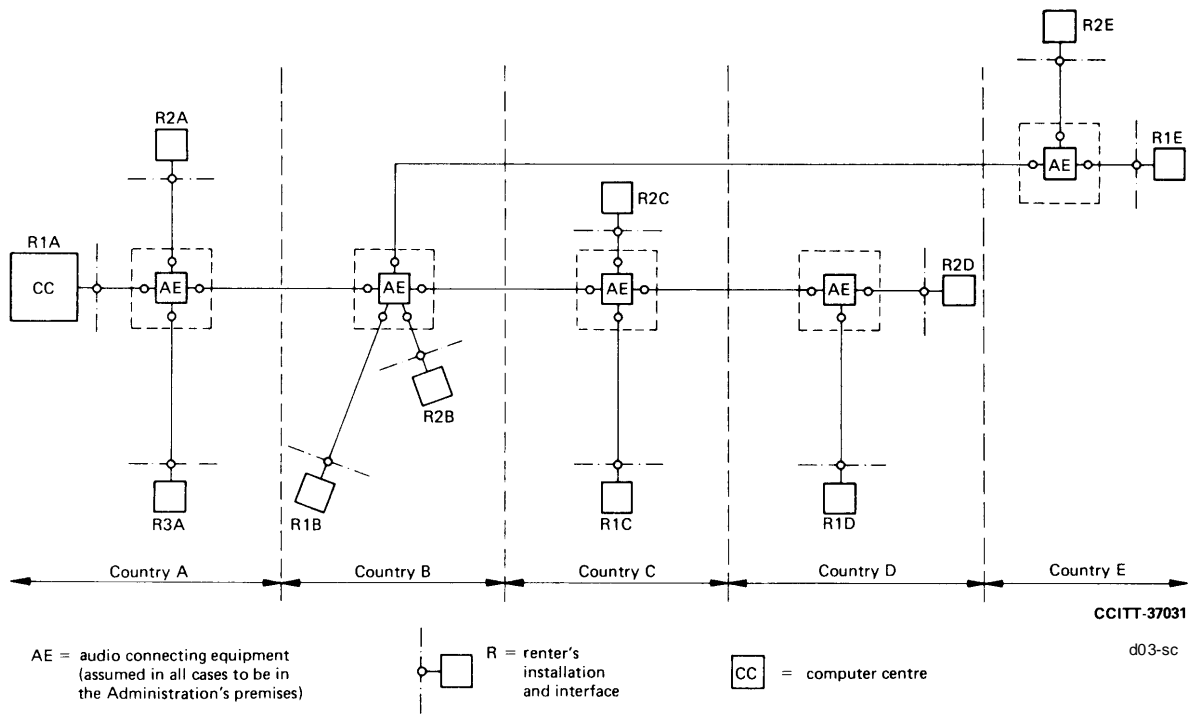


FIGURE 3/M.1015
Example of an international leased multiterminal data circuit