



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

M.120

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

**MAINTENANCE :
INTRODUCTION AND GENERAL PRINCIPLES**

ACCESS POINTS FOR MAINTENANCE

ITU-T Recommendation M.120

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation M.120 was published in Fascicle IV.1 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.120

ACCESS POINTS FOR MAINTENANCE

For lining-up and fault localization it is proposed to define access points at boundaries such as between switching and transmission. A division of maintenance responsibilities can be achieved with the aid of line access points, digital path access points and analogue link access points. The following concepts are compatible with the division shown in Recommendations Q.45 (Figure 1/Q.45) [1] and Q.502 (Figure 1/Q.502) [2].

- a) A line access point separates an analogue exchange from analogue or digital transmission [see a) and b) of Figure 1/M.120].

Location and interfaces of line access points are defined in Recommendation M.565.

- b) A digital path access point separates a digital exchange from analogue or digital transmission [see c) and d) of Figure 1/M.120].

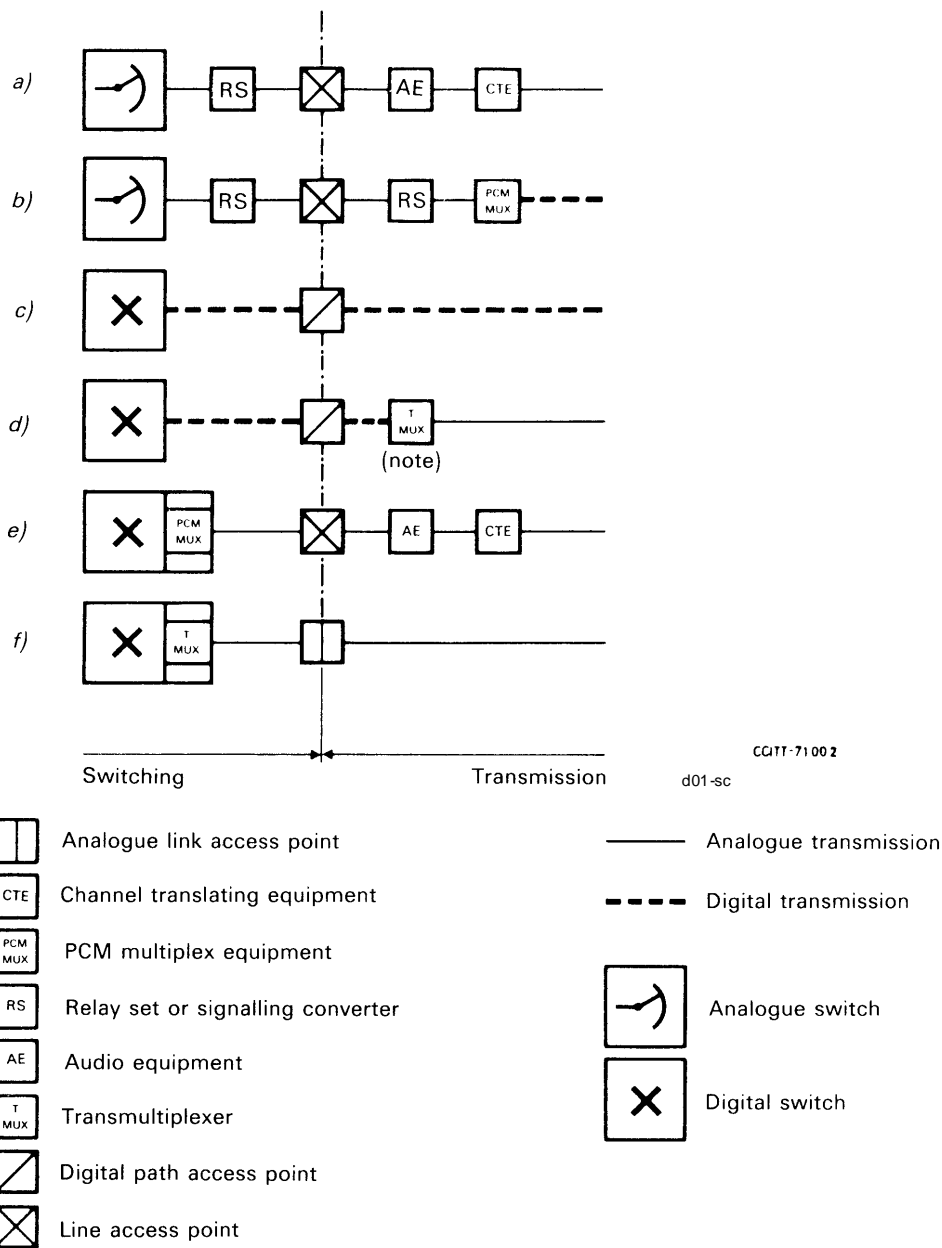
Digital path access points are located at the input and output ports of digital paths. Interfaces are defined in Recommendation G.703 [3].

- c) A line access point separates the digital exchange from the analogue transmission [see e) of Figure 1/M.120].

- d) An analogue link access point separates a digital exchange from an analogue transmission if line access or digital path access is not provided. f) of Figure 1/M.120 shows as an example the collocation of a transmultiplexer with a digital exchange.

Analogue link access points are located at the input and output ports of analogue links. Interfaces are defined in Recommendation G.233 [4].

Normally line access points, digital path access points and analogue link access points are provided as equipment interface, e.g. accessible at distribution frames.



Note – The transmultiplexer shown could also be a PCM multiplex equipment/channel translating equipment combination.

FIGURE 1/M.120

Access points for division of maintenance responsibilities

References

- [1] CCITT Recommendation *Transmission Characteristics of an International Exchange*, Vol. VI, Rec. Q.45.
- [2] CCITT Recommendation *Interfaces*, Red Book, Vol. VI, Rec. Q.502, ITU, Geneva, 1985.
- [3] CCITT Recommendation *Physical/Electrical Characteristics of Hierarchical Digital Interfaces*, Vol. III, Rec. G.703.
- [4] CCITT Recommendation *Recommendations Concerning Translating Equipment*, Vol. III, Rec. G.233.