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SERIES E: OVERALL NETWORK OPERATION,
TELEPHONE SERVICE, SERVICE OPERATION AND
HUMAN FACTORS

International telephone network management and
checking of service quality – Checking the quality of the
international telephone service

**GENERAL GUIDE TO THE PERCENTAGE OF
EFFECTIVE ATTEMPTS WHICH SHOULD BE
OBSERVED FOR INTERNATIONAL
TELEPHONE CALLS**

Reedition of CCITT Recommendation E.426 published in
the Blue Book, Fascicle II.3 (1988)

NOTES

1 CCITT Recommendation E.426 was published in Fascicle II.3 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.

Recommendation E.426

GENERAL GUIDE TO THE PERCENTAGE OF EFFECTIVE ATTEMPTS WHICH SHOULD BE OBSERVED FOR INTERNATIONAL TELEPHONE CALLS

1 General considerations

1.1 The success of call attempts is fundamental to an automatic international telephone service of high quality.

1.2 The periodic observation of completion ratio¹ and the categorization of failures to destination countries together with the exchange of such information between countries are valuable to establish and/or maintain a high service quality.

1.3 The call completion ratio of the national network of a given country, as manifested through its international switching centre(s), affects the efficiency of operation of all countries routing traffic to that country.

1.4 Call completion ratio information can be provided either internally in an SPC international switching centre or externally at the level of the outgoing international circuits in any international switching centre in which access to the circuits is provided for the purpose of establishing the disposition of call attempts.

1.5 The availability, flexibility and capacity of minicomputers provides an economically attractive method of obtaining call completion ratio information with extreme accuracy. This includes the observation of tones when suitable interfaces with the minicomputer are provided.

2 A guide to the proportion of effective call attempts

2.1 A general guide for the expected percentage of effective call attempts during the mean busy hour and its two immediately adjacent hours, as observed at the originating international switching exchange, is indicated below. An effective call attempt is defined, for this purpose, as one for which an answer is received at the originating international exchange. Faults caused by the originating international exchange shall be excluded to the extent feasible. All attempts which succeed in seizing an international circuit shall be included in the results:

- a) low level of effective call attempts: less than 30%;
- b) medium level of effective call attempts: 30% to 60%;
- c) high level of effective call attempts: more than 60%.

2.2 When an originating country notes a downward change in the level of effective call attempts towards any destination, the originating, destination or transit Administrations should initiate investigations to determine and alleviate the underlying causes (e.g. network provisioning, subscriber behaviour). The objective of this action is to avoid degradation in the level of effective call attempts.

¹ See Recommendation E.600.

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