INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

E.426

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TELEPHONE NETWORK AND ISDN

QUALITY OF SERVICE, NETWORK MANAGEMENT AND TRAFFIC ENGINEERING

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

Recommendation E.426

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation E.426 was revised by Study Group II and was approved under the Resolution No. 2 procedure on the 30th October 1992.

CCITT NOTE

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

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

(revised 1992)

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 ratio[1)] 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 a stored program controlled (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 for the specific country (or area code) route, its two adjacent hours, and the whole day, 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.

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1) See Recommendation E.600.