



INTERNATIONAL TELECOMMUNICATION UNION

CCITT

E.434

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

**TELEPHONE NETWORK AND ISDN
QUALITY OF SERVICE,
NETWORK MANAGEMENT AND TRAFFIC
ENGINEERING**

**SUBSCRIBER-TO-SUBSCRIBER
MEASUREMENT OF PUBLIC SWITCHED
TELEPHONE NETWORK**

Recommendation E.434



Geneva, 1992



INTERNATIONAL TELECOMMUNICATION UNION

CCITT

E.434

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

**TELEPHONE NETWORK AND ISDN
QUALITY OF SERVICE,
NETWORK MANAGEMENT AND TRAFFIC
ENGINEERING**

**SUBSCRIBER-TO-SUBSCRIBER
MEASUREMENT OF PUBLIC SWITCHED
TELEPHONE NETWORK**

Recommendation E.434



Geneva, 1992

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.434 was prepared by Study Group II and was approved under the Resolution No. 2 procedure on the 16th of June 1992.

CCITT NOTES

- 1) In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication Administration and a recognized private operating agency.
- 2) A list of abbreviations used in this Recommendation can be found in Annex A.

© ITU 1992

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.

Recommendation E.434

SUBSCRIBER-TO-SUBSCRIBER MEASUREMENT OF THE PUBLIC SWITCHED TELEPHONE NETWORK

1 Introduction

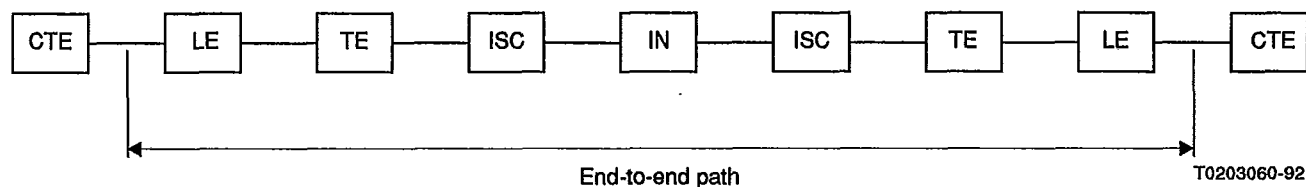
Subscriber-to-subscriber ¹⁾ service quality measurements are taken end-to-end as defined in Figure 1/E.434. These measurements are taken:

- to relate network quality to customers' expectations which are based upon previous experience with the network;
- to ensure that objective measures are made of the network;
- to ensure that acceptable thresholds of quality are being met;
- to ensure that regulatory requirements are met;
- to ensure that the distant correspondent's level of quality meets other network providers' needs.

To assess the network service quality requires the collection of the following:

- end-to-end network measurements results;
- customer perception of network quality.

Related publications in this area are Recommendations E.424, E.431, E.433, E.435 and M.1235 and the *Hand Book on Quality of Service and network performance: Annex E, E-series Recommendations which include numerical objectives to be published in 1992*).



LE Local exchange
 TE Transit exchange
 CTE Customer's terminating equipment
 ISC International switching centre
 IN International network

FIGURE 1/E.434

Reference diagram for end-to-end measurements

2 Scope

The aim of this Recommendation is to define end-to-end measurements of the public switched telephone network (PSTN), detailing:

- the methods and processes for testing;
- the measurements required;

¹⁾ Subscriber-to-subscriber type test calls are defined in Recommendation E.424.