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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Information processing systems — Data communication — Automatic fault isolation procedures using test loops

Systèmes de traitement de l'information — Communication de données — Procédures automatiques de localisation des défauts utilisant des boucles de test

Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 9067 was prepared by Technical Committee ISO/TC 97, *Information processing systems.*

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Information processing systems — Data communication — Automatic fault isolation procedures using test loops

0 Introduction

When transmission failures of a repetitive or continuing nature occur in a data communication system, fault isolation, or the identification of the faulty equipment or faulty portion of line included in the system, could be achieved by operating test loops implemented in DTEs and DCEs. This International Standard describes how automatic fault isolation can be achieved by the DTE by the use of loop test procedures.

Control of test loops via an operator console is also dealt with in this International Standard.

1 Scope and field of application

This International Standard describes fault isolation procedures using test loops and applies to DTEs which are connected to DCEs with the automatic test loop facility, standardized in the V-series or X-series CCITT[1] Recommendations.

In the V-series, the means for DTE control of test loops via interchange circuits in the DTE/DCE interface are specified in CCITT Recommendations V.24 and V.54.

In the X-series, the means for DTE control of test loops via interchange circuits or signals in the DTE/DCE interface are specified in CCITT Recommendations X.24, X.150 and the individual DTE/DCE Interface CCITT Recommendations X.20, X.20 bis, X.21, X.21 bis and X.22.

NOTES

1 CCITT Recommendation X.150 specifies the definition of test loops, the principles for the control of test loops and the principles for the indications to be presented. Specific details concerning the implementation of these principles are contained in the individual DTE/DCE Interface Recommendations.

2 The inclusion of test procedures covered by the I-series Recommendations is for further study.

2 References

CCITT Recommendation V.24, *List of definitions for interchange circuits between data terminal equipment and data circuit-terminating equipment*.

CCITT Recommendation V.52, *Characteristics of distortion and error-rate measuring apparatus for data transmission*.

CCITT Recommendation V.54, *Loop test devices for modems*.

CCITT Recommendation X.20, *Interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for start-stop transmission services on public data networks*.

CCITT Recommendation X.20 *bis, Use on public data networks of data terminal equipment (DTE) which is designed for interfacing to asynchronous duplex V-series modems*.

CCITT Recommendation X.21, *Interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for synchronous operation on public data networks*.

CCITT Recommendation X.21 *bis, Use on public data networks of data terminal equipment (DTE) which is designed for interfacing to synchronous V-series modems*.

CCITT Recommendation X.22, *Multiplex DTE/DCE interface for user classes 3-6*.

CCITT Recommendation X.24, *List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) on public data networks*.

CCITT Recommendation X.150, *Principles of maintenance testing for public data networks using data terminal equipment (DTE) and data circuit-terminating equipment DCE) test loops*.

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1) International Telegraph and Telephone Consultative Committee.