TECHNICAL REPORT

ISO/IEC TR 14763-3

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2000-07

Information technology –

Implementation and operation of customer premises cabling –

Part 3: Testing of optical fibre cabling

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

INFORMATION TECHNOLOGY – IMPLEMENTATION AND OPERATION OF CUSTOMER PREMISES CABLING –

Part 3: Testing of optical fibre cabling

FOREWORD

1) ISO (International Organization for Standardization) and IEC (International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

2) In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

3) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

The main task of IEC and ISO technical committees is to prepare International Standards. In exceptional circumstances, a technical committee may propose the publication of a technical report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where, for any other reason, there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when the technical committee has collected data of a different kind from that which is normally published as an International Standard, for example ‘state of the art’.

Technical reports of types 1 and 2 are subject to review within three years of publication to decide whether they can be transformed into International Standards. Technical reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/IEC 14763-3, which is a technical report of type 3, was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

This document is not to be regarded as an International Standard. Comments on the content of this document should be sent to the IEC Central Office.

INTRODUCTION

This Technical Report is one of two prepared in support of international standard ISO/IEC 11801. The diagram below shows the inter-relationship of the currently developed Technical Reports and other supporting standards.

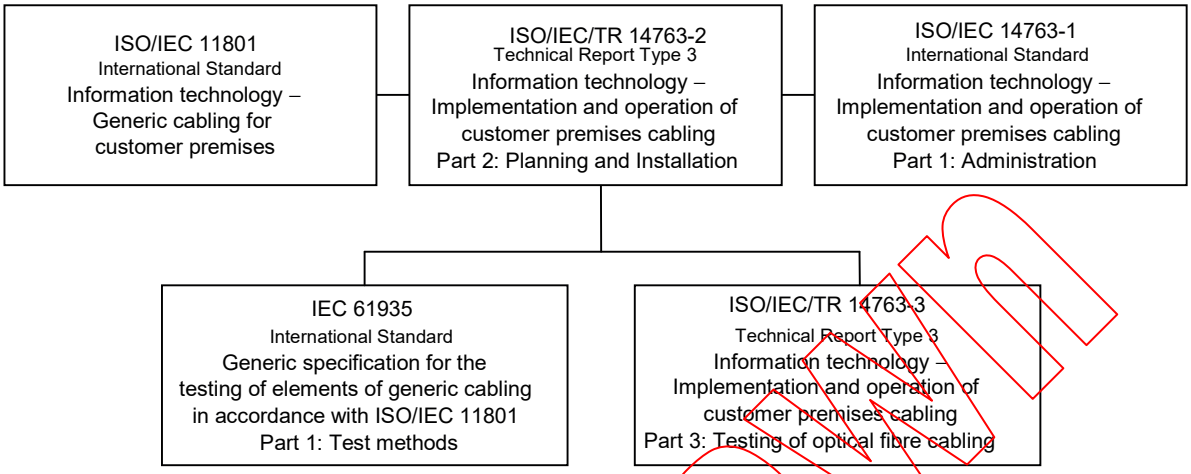

Figure 1 – Document relationships

This document forms Part 3 of ISO/IEC 14763 (Technical Report, type 3) and details test procedures for optical fibre cabling which has been:

- designed in accordance with ISO/IEC 11801;
- installed according to the recommendations of ISO/IEC 14763-2 (Technical Report, type 3).

Users of this document should be familiar with both ISO/IEC 11801 and ISO/IEC 14763-2.

The test procedures within this document may be undertaken as acceptance, trouble-shooting or compliance tests as defined in Annex A of ISO/IEC 11801.

Three test regimes are discussed:

- component acceptance tests: undertaken following delivery of components, prior to installation;
- Stage 1 tests: undertaken at relevant contractual intervals during the installation;
- Stage 2 tests: final acceptance tests.

The Quality Plan for each installation will define the acceptance tests and sampling levels selected for that installation. Recommendations for the development of a Quality Plan are contained in ISO/IEC 14763-2.

INFORMATION TECHNOLOGY – IMPLEMENTATION AND OPERATION OF CUSTOMER PREMISES CABLING –

Part 3: Testing of optical fibre cabling

1 Scope

This Technical Report outlines the test procedures to be used to ensure that optical fibre cabling, designed in accordance with ISO/IEC 11801 and installed according to the recommendations of ISO/IEC 14763-2, is capable of delivering the level of transmission performance specified in ISO/IEC 11801.

2 Reference documents

This document contains dated or undated references to specifications from other publications. These references are quoted at the relevant points in the text and the publications are listed below. In the case of dated references, subsequent changes or revisions to these publications belong to this standard only if they have been incorporated by change or revision. In the case of undated references, the latest edition of the relevant publications is applicable in each case.

ISO/IEC 11801, *Information Technology – Generic Cabling for Customer Premises*

ISO/IEC 14763-2, *Implementation and Operation of Customer Premises Cabling – Part 2: Planning and Installation*

IEC 60050(731), *International Electrotechnical Vocabulary (IEV) – Chapter 731: Optical fibre communications*

IEC 61280-4-1 (in preparation) *Fibre optic communication system basic test procedures – Test procedures for fibre optic cable plant – Part 1: Multimode fibre optic cable plant attenuation measurement*

IEC 61280-4-2 (in preparation), *Fibre optic communication system basic test procedures – Test procedures for fibre optic cable plant – Part 2: Single mode fibre optic cable plant attenuation measurement*

IEC 61300-3-6:1997, *Basic fibre optic test procedures – Part 3: Examination and measurement – Section 6: Return loss*

IEC 61300-3-34, *Basic fibre optic test procedures – Part 3: Examination and measurement – Section 34: Attenuation of random mated connectors*