
**Information technology —
Telecommunications and information
exchange between systems — Local and
metropolitan area networks — Specific
requirements —**

Part 5:

**Token ring access method and physical layer
specifications**

**AMENDMENT 1: Dedicated token ring
operation and fibre optic media**

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Réseaux locaux et urbains — Exigences
spécifiques —*

*Partie 5: Méthode d'accès par anneau à jeton et spécifications pour la
couche physique*

*AMENDEMENT 1: Opération par dédicace d'anneau à jeton et milieux en
fibres optiques*

International Standard ISO/IEC 8802-5:1998/Amd.1:1998(E)

ISO (the International Organization for Standardization) and IEC (the 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.

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.

Amendment 1 to ISO/IEC 8802-5:1998 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

(standards.iteh.ai)

[ISO/IEC 8802-5:1998/Amd 1:1998](https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998)

<https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998>



International Organization for Standardization/International Electrotechnical Commission
Case postale 56 • CH-1211 Genève 20 • Switzerland

ISO/IEC 8802-5 : 1998/Amd. 1: 1998
ANSI/IEEE Std 802.5r-1997 and 802.5j-1997, 1998 Edition
(Supplements to ANSI/IEEE Std 802.5, 1998 Edition)

**Information technology—
Telecommunications and information
exchange between systems—
Local and metropolitan area networks—
Specific requirements—**

**Part 5: Token ring access method and
physical layer specifications**

**Amendment 1: Dedicated token ring
operation and fibre optic media**

Sponsor

**LAN MAN Standards Committee
of the
IEEE Computer Society**

Abstract: This amendment to Local and Metropolitan Area Network standard, ISO/IEC 8802-5 : 1998, is part of a family of local area network (LAN) standards dealing with the physical and data link layers as defined by the ISO/IEC Open Systems Interconnection Basic Reference Model. The requirements for dedicated token ring (DTR) operation are specified, including the changes and additions to the Medium Access Control (MAC) layer to provide for an additional full-duplex mode of operation (switching), and for interconnection of shared LAN segments to switch ports. Also specified are the characteristics of a fibre optic interface for connecting a 4 Mbit/s or 16 Mbit/s token ring station to the trunk coupling unit (TCU) of a token ring, including station, port, and channel requirements. Fibre optic trunk signaling recommendations are also made.

Keywords: data processing interconnection, dedicated token ring, fibre optic media, full duplex operation, insertion key, local area network (LAN), medium access control (MAC), token ring

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO/IEC 8802-5:1998/Amd 1:1998](https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998)

<https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998>

The Institute of Electrical and Electronics Engineers, Inc.
345 East 47th Street, New York, NY 10017-2394, USA

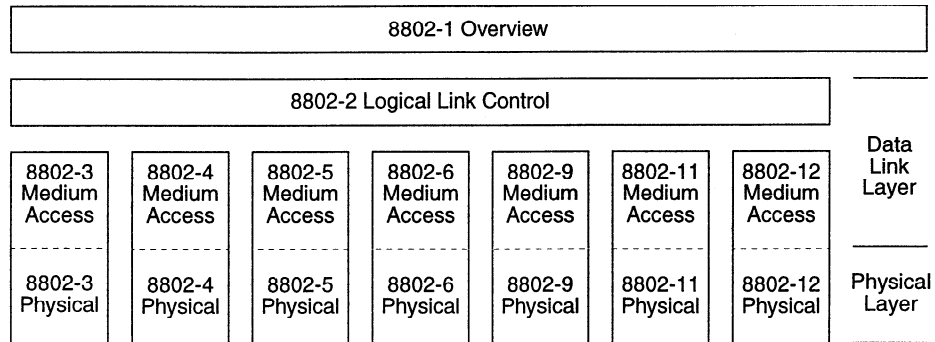
Copyright © 1998 by the Institute of Electrical and Electronics Engineers, Inc.
All rights reserved. Published 1998. This printing is by the International Organization for Standardization with special permission of the Institute of Electrical and Electronics Engineers, Inc. Printed in Geneva, Switzerland.

ISBN 0-7381-0236-9

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

Foreword to ISO/IEC 8802-5 : 1998/Amd. 1: 1998

This International Standard is part of a family of International Standards for Local and Metropolitan Area Networks. The relationship between this International Standard and the other members of the family is shown below. (The numbers in the figure refer to ISO/IEC Standard numbers.)



This family of International Standards deals with the Physical and Data Link layers as defined by the ISO/IEC Open Systems Interconnection (OSI) Basic Reference Model (ISO/IEC 7498-1 : 1994). The access standards define seven types of medium access technologies and associated physical media, each appropriate for particular applications or system objectives. Other types are under investigation.

The International Standards defining the access technologies are as follows:

- ISO/IEC 8802-3, utilizing carrier sense multiple access with collision detection (CSMA/CD) as the access method.
- ISO/IEC 8802-4, utilizing token passing bus as the access method.
- ISO/IEC 8802-5, utilizing token passing ring as the access method.
- ISO/IEC 8802-6, utilizing distributed queuing dual bus as the access method.
- ISO/IEC 8802-9, a unified access method offering integrated services for backbone networks.
- ISO/IEC DIS 8802-11, a wireless LAN utilizing carrier sense multiple access with collision avoidance (CSMA/CA) as the access method. 5-1998-amd-1-1998
- ISO/IEC DIS 8802-12, utilizing Demand Priority as the access method.

ISO/IEC TR 8802-1, *Overview of Local Area Network Standards*, provides an overview of the series of ISO/IEC 8802 standards.

ISO/IEC 8802-2, *Logical Link Control*, is used in conjunction with the medium access standards to provide the data link layer service to network layer protocols.

ISO/IEC 15802-1, *Medium Access Control (MAC) service definition*, specifies the characteristics of the common MAC Service provided by all IEEE 802 LAN MACs. The service is defined in terms of primitives that can be passed between peer service users, their parameters, their interrelationship and valid sequences, and the associated events of the service.

ISO/IEC 15802-2, *LAN/MAN Management*, defines an OSI management-compatible architecture, and services and protocol elements for use in a LAN/MAN environment for performing remote management.

ISO/IEC 10038, *Media Access Control (MAC) bridges*, specifies an architecture and protocol for the interconnection of IEEE 802 LANs below the level of the logical link control protocol (to be renumbered 15802-3).

ISO/IEC 15802-4, *System Load Protocol*, specifies a set of services and protocol for those aspects of management concerned with the loading of systems on IEEE 802 LANs.

ISO/IEC 15802-5, *Remote Media Access Control (MAC) bridging*, specifies extensions for the interconnection, using non-LAN communication technologies, of geographically separated IEEE 802 LANs below the level of the logical link control protocol.

ANSI/IEEE Std 802.5r-1997 and 802.5j-1997, 1998 Edition

IEEE Standards documents are developed within the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (IEEE-SA) Standards Board. Members of the committees serve voluntarily and without compensation. They are not necessarily members of the Institute. The standards developed within IEEE represent a consensus of the broad expertise on the subject within the Institute as well as those activities outside of IEEE that have expressed an interest in participating in the development of the standard.

Use of an IEEE Standard is wholly voluntary. The existence of an IEEE Standard does not imply that there are no other ways to produce, test, measure, purchase, market, or provide other goods and services related to the scope of the IEEE Standard. Furthermore, the viewpoint expressed at the time a standard is approved and issued is subject to change brought about through developments in the state of the art and comments received from users of the standard. Every IEEE Standard is subjected to review at least every five years for revision or reaffirmation. When a document is more than five years old and has not been reaffirmed, it is reasonable to conclude that its contents, although still of some value, do not wholly reflect the present state of the art. Users are cautioned to check to determine that they have the latest edition of any IEEE Standard.

Comments for revision of IEEE Standards are welcome from any interested party, regardless of membership affiliation with IEEE. Suggestions for changes in documents should be in the form of a proposed change of text, together with appropriate supporting comments.

Interpretations: Occasionally questions may arise regarding the meaning of portions of standards as they relate to specific applications. When the need for interpretations is brought to the attention of IEEE, the Institute will initiate action to prepare appropriate responses. Since IEEE Standards represent a consensus of all concerned interests, it is important to ensure that any interpretation has also received the concurrence of a balance of interests. For this reason, IEEE and the members of its societies and Standards Coordinating Committees are not able to provide an instant response to interpretation requests except in those cases where the matter has previously received formal consideration.

<https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-a225ca1b3786/iec-802.5:1998/Amd 1:1998>

Comments on standards and requests for interpretations should be addressed to:

Secretary, IEEE-SA Standards Board
445 Hoes Lane
P.O. Box 1331
Piscataway, NJ 08855-1331
USA

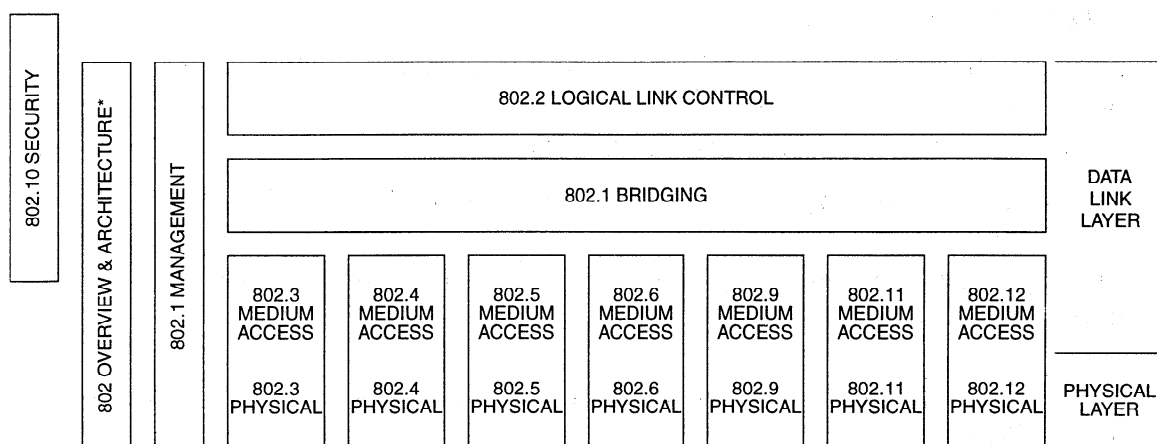
Note: Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. The IEEE shall not be responsible for identifying patents for which a license may be required by an IEEE standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

Authorization to photocopy portions of any individual standard for internal or personal use is granted by the Institute of Electrical and Electronics Engineers, Inc., provided that the appropriate fee is paid to Copyright Clearance Center. To arrange for payment of licensing fee, please contact Copyright Clearance Center, Customer Service, 222 Rosewood Drive, Danvers, MA 01923 USA; (978) 750-8400. Permission to photocopy portions of any individual standard for educational classroom use can also be obtained through the Copyright Clearance Center.

Introduction to ANSI/IEEE Std 802.5r-1997 and 802.5j-1997, 1998 Edition

(This introduction is not a part of ANSI/IEEE Stds 802.5r-1997 and 802.5j-1997, or of ISO/IEC 8802-5 : 1998/Amd. 1: 1998.)

This standard is part of a family of standards for local and metropolitan area networks. The relationship between the standard and other members of the family is shown below. (The numbers in the figure refer to IEEE standard numbers.)



* Formerly IEEE Std 802.1A.

IEEE STANDARD PREVIEW

This family of standards deals with the Physical and Data Link layers as defined by the International Organization for Standardization (ISO) Open Systems Interconnection (OSI) Basic Reference Model (ISO/IEC 7498-1 : 1994). The access standards define seven types of medium access technologies and associated physical media, each appropriate for particular applications or system objectives. Other types are under investigation.

The standards defining the technologies noted above are as follows:

- IEEE Std 802 *Overview and Architecture.* This standard provides an overview to the family of IEEE 802 Standards.
- ANSI/IEEE Std 802.1B and 802.1k [ISO/IEC 15802-2] *LAN/MAN Management.* Defines an OSI management-compatible architecture, and services and protocol elements for use in a LAN/MAN environment for performing remote management.
- ANSI/IEEE Std 802.1D [ISO/IEC 10038] *Media Access Control (MAC) Bridges.* Specifies an architecture and protocol for the interconnection of IEEE 802 LANs below the MAC service boundary.
- ANSI/IEEE Std 802.1E [ISO/IEC 15802-4] *System Load Protocol.* Specifies a set of services and protocol for those aspects of management concerned with the loading of systems on IEEE 802 LANs.
- ANSI/IEEE Std 802.1F *Common Definitions and Procedures for IEEE 802 Management Information*
- ANSI/IEEE Std 802.1G [ISO/IEC 15802-5] *Remote Media Access Control (MAC) Bridging.* Specifies extensions for the interconnection, using non-LAN communication technologies, of geographically separated IEEE 802 LANs below the level of the logical link control protocol.
- ANSI/IEEE Std 802.2 [ISO/IEC 8802-2] *Logical Link Control*

- ANSI/IEEE Std 802.3 [ISO/IEC 8802-3] *CSMA/CD Access Method and Physical Layer Specifications*
- ANSI/IEEE Std 802.4 [ISO/IEC 8802-4] *Token Passing Bus Access Method and Physical Layer Specifications*
- ANSI/IEEE Std 802.5 [ISO/IEC 8802-5] *Token Ring Access Method and Physical Layer Specifications*
- ANSI/IEEE Std 802.6 [ISO/IEC 8802-6] *Distributed Queue Dual Bus Access Method and Physical Layer Specifications*
- ANSI/IEEE Std 802.9 [ISO/IEC 8802-9] *Integrated Services (IS) LAN Interface at the Medium Access Control (MAC) and Physical (PHY) Layers*
- ANSI/IEEE Std 802.10 *Interoperable LAN/MAN Security*
- ANSI/IEEE Std 802.11 [ISO/IEC DIS 8802-11] *Wireless LAN Medium Access Control (MAC) and Physical Layer Specifications*
- ANSI/IEEE Std 802.12 [ISO/IEC DIS 8802-12] *Demand Priority Access Method, Physical Layer and Repeater Specifications*

In addition to the family of standards, the following is a recommended practice for a common Physical Layer technology:

- IEEE Std 802.7 *IEEE Recommended Practice for Broadband Local Area Networks*

ITeH STANDARD PREVIEW
(standards.iteh.ai)

The following additional working group has authorized standards projects under development:

- IEEE 802.14 <https://standards.iteh.ai/catalog/standards/sist/e9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998>
Standard Protocol for Cable-TV Based Broadband Communication Network

Conformance test methodology

An additional standards series, identified by the number 1802, has been established to identify the conformance test methodology documents for the 802 family of standards. Thus the conformance test documents for 802.3 are numbered 1802.3.

ANSI/IEEE Std 802.5r-1997 and 802.5j-1997, 1998 Edition [ISO/IEC 8802-5 : 1998/ Amd. 1: 1998]

This amendment to the IEEE 802.5 token ring standard extends the capability of token ring by defining and specifying dedicated token ring operation, a new class of token ring adapters that can operate in full duplex mode, and a new C-Port for attachment of stations to the LAN. This standard provides for the interconnection of shared and dedicated token ring LAN segments via the newly defined C-Port. Full backward and forward compatibility of hardware is provided for, with newly defined C-Ports able to detect and interoperate with both legacy token ring adapters, and with adapters designed to this new standard. Additionally, the newly defined adapters can operate in full duplex mode when connected to a C-Port, and can operate in classic or shared mode when attached to a shared concentrator port as defined in the base standard.

This amendment also defines operation over fibre optic media, upgrading the "Trial Use" optical fibre standard to full-use status. Also described are recommendations for fibre trunk interconnection.

Participants

The following is a list of those who were members of the IEEE 802.5 Working Group when IEEE Std 802.5r-1997 was approved:

Robert D. Love, Chair and Editor-in-Chief

Jim Carlo, Technical Editor

Neil Jarvis, Technical Editor

Michael Siegel, Technical Editor

Kenneth T. Wilson, Technical Editor

Jeremy Curtis
William Douglass
Paul Gessert
Martin Gurthrie
Sharam Hakimi
Michael Hanrahan
Ivar Jeppesen
Allen Kasey
Ken Kutzler

George Lin
Joseph Mazor
Kelly P. McClellan
John Messenger
John E. Montague
Ivan Oakley
Syoun-Chin Peng
Kirk Preiss

Bob Ross
Tony Rowell
Bill Sarles
Steve Scandalis
Showi-min Shen
Kevin G. Smith
Trevor Warwick
David W. Wilson
Edward C. Wong

The following persons were on the balloting committee of IEEE Std 802.5r-1997:

William B. Adams
Don Aelmore
Paul D. Amer
Jack S. Andresen
Frederic Bauchot
Manuel J. Betancor*
Kathleen L. Briggs
Peter K. Campbell
James T. Carlo
David E. Carlson
Alan M. Chambers
Robert S. Crowder
Christos Douligeris
Sourav K. Dutta
Paul S. Eastman
Philip H. Enslow
Changxin Fan
John W. Fendrich
Mark R. M. Ferguson
Harvey A. Freeman
Robert J. Gagliano
Gautam Garai
Julio Gonzalez Sanz
Martin Guthrie
Kenneth C. Heck

Richard J. Iliff
Neil A. Jarvis
Henry D. Keen
Peter M. Kelly
Gary C. Kessler
Yongbum Kim
Henrieous Koeman
Stephen Barton Kruger
William G. Lane
Lanse M. Leach
Walter Levy
Randolph S. Little
Robert D. Love
Bennett Meyer
Richard H. Miller
David S. Millman
Warren Monroe
John E. Montague
David J. Morris
Wayne D. Moyers
Charles Oestereicher
Joerg Ottensmeyer
Roger Pandanda
Ronald C. Petersen
Thomas L. Phinney

Vikram Punj
Ivan Reede
John P. Riganati
Edouard Y. Rocher
James W. Romlein
Floyd E. Ross
Michael Salzman
Stephen Scandalis
Norman Schneidewind
Rich Seifert
Lee A. Sendelbach
Donald A. Sheppard
Joseph S. Skorupa
Fred J. Strauss
Efstathios D. Sykas
Patricia Thaler
Geoffrey O. Thompson
Robert C. Tripi
Mark-Rene Uchida
James Vorhies
Yun-Che Wang
Raymond P. Wenig
Paul A. Willis
David W. Wilson
Qian-li Yang

*Deceased

Participants

The following is a list of those who were members of the IEEE 802.5 Working Group when IEEE Std 802.5j-1997 was approved:

Robert D. Love, Chair
Paul Gessert, Technical Editor

Jim Carlo
Jeremy Curtis
William Douglass
Martin Gurthrie
Sharam Hakimi
Michael Hanrahan
Neil Jarvis
Ivar Jeppesen
Allen Kasey
Ken Kutzler

George Lin
Joseph Mazor
Kelly P. McClellan
John Messenger
John E. Montague
Ivan Oakley
Syou-Chin Peng
Kirk Preiss
Bob Ross

Tony Rowell
Bill Sarles
Steve Scandalis
Showi-min Shen
Michael Siegel
Kevin G. Smith
Trevor Warwick
David W. Wilson
Kenneth T. Wilson
Edward C. Wong

The following persons were on the balloting committee of IEEE Std 802.5j-1997:

William B. Adams
Don Aelmore
Jack S. Andresen
Kit Athul
William E. Ayen
Frederic Bauchot
J. Paul Benson, Jr.
Kathleen L. Briggs
Peter K. Campbell
James T. Carlo
David E. Carlson
Robert S. Crowder
Christos Douligeris
Sourav K. Dutta
Paul S. Eastman
Changxin Fan
John W. Fendrich
Harvey A. Freeman
Robert J. Gagliano
Gautam Garai
Paul Gessert
Julio Gonzalez Sanz
Martin Guthrie
Delon Hanson

Kenneth C. Heck
Richard J. Iliff
Neil A. Jarvis
Peter M. Kelly
Gary C. Kessler
Yongbum Kim
Stephen Barton Kruger
Lanse M. Leach
Walter Levy
Randolph S. Little
Robert D. Love
Bennett Meyer
Richard H. Miller
David S. Millman
Warren Monroc
John E. Montague
David J. Morris
James R. Moulton
Wayne D. Moyers
Charles Oestereicher
Roger Pandanda
Lucy W. Person
Ronald C. Petersen
Thomas L. Phinney

Ivan Reede
Edouard Y. Rocher
James W. Romlein
Floyd E. Ross
Michael Salzman
F. Williams Sarles
Stephen Scandalis
Norman Schneidewind
Lee A. Sendelbach
Donald A. Sheppard
Joseph S. Skorupa
Rosemary Slager
Fred J. Strauss
Efstathios D. Sykas
Geoffrey O. Thompson
Robert C. Tripi
Mark-Rene Uchida
Emmanuel Van Lil
James Vorhies
Yun-Che Wang
Raymond P. Wenig
Paul A. Willis
David W. Wilson
Qian-li Yang

When the IEEE Standards Board approved IEEE Std 802.5r and IEEE Std 802.5j on 16 September 1997, it had the following membership:

Donald C. Loughry, *Chair*

Richard J. Holleman, *Vice Chair*

Andrew G. Salem, *Secretary*

Clyde R. Camp
Stephen L. Diamond
Harold E. Epstein
Donald C. Fleckenstein
Jay Forster†
Thomas F. Garrity
Donald N. Heirman
Jim Isaak
Ben C. Johnson

Lowell Johnson
Robert Kennelly
E. G. "Al" Kiener
Joseph L. Koepfinger†
Stephen R. Lambert
Lawrence V. McCall
L. Bruce McClung
Marco W. Migliaro

Louis-François Pau
Gerald H. Peterson
John W. Pope
Jose R. Ramos
Ronald H. Reimer
Ingo Rüsich
John S. Ryan
Chee Kiow Tan
Howard L. Wolfman

†Member Emeritus

Also included are the following nonvoting IEEE Standards Board liaisons:

Satish K. Aggarwal
Alan H. Cookson

Kristin Dittmann
IEEE Standards Project Editor

iTeh STANDARD PREVIEW

(standards.iteh.ai)

IEEE Std 802.5r-1997 was approved by the American National Standards Institute on 2 June 1998. IEEE Std 802.5j-1997 was approved by the American National Standards Institute on 15 April 1998.

[ISO/IEC 8802-5:1998/Amd 1:1998](https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998)

<https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998>

Contents

1.	Changes to clauses 1 and 2 of ISO/IEC 8802-5 : 1998.....	1
1.1	Scope	1
1.2	Normative references.....	2
1.3	Definitions	3
1.5	Abbreviations and acronyms	5
1.6	Conformance requirements—classic station.....	6
1.7	Conformance requirements—classic concentrator	6
1.8	DTR conformance requirements.....	6
1.9	Fibre optic media conformance requirements.....	11
2.5	Physical structure of a DTR network.....	12
2.6	Station and C-Port operating modes	14
9.	Dedicated token ring (DTR).....	16
9.1	DTR TXI and TKP access protocol support.....	18
9.2	Station TXI access protocol specification	39
9.3	C-Port join and TXI access protocol specification	72
9.4	C-Port in Port mode TKP access protocol specification.....	102
9.5	C-Port Station Emulation mode TKP access protocol specification.....	135
9.6	DTR Station TKP access protocol specification.....	174
9.7	C-Port specific components and specifications	196
10.	DTR formats and facilities	200
10.1	Formats	200
10.2	Field descriptions.....	200
10.3	MAC frames	202
10.4	System timers.....	218
10.5	Policy flags and variables	223
10.6	Error counters	227
11.	DTR Station and C-Port management.....	229
11.1	DTR Station management	229
11.2	C-Port management.....	240
11.3	Management information definitions	252
12.	DTU interface.....	281
12.1	DTU—PMAC interface service specification.....	281
13.	Fibre optic media.....	285
13.1	Clause numbering	285
13.2	Overview	285
13.7	Station attachment specifications.....	286
	Annex 13.A (normative) Alternate fibres.....	294
	Annex 13.B (informative) FOTCU trunk signaling recommendations.....	295

Annexes

A.5	Major capabilities	298
A.10	PICS proforma for DTR Station using the TXI access protocol—DTRSTXI::M	301
A.11	PICS proforma for DTR Station using the TKP access protocol DTRSTKP::M	305
A.12	PICS proforma for C-Port in Port mode using the TXI access protocol DTRPTXI::M	307
A.13	PICS proforma for C-Port in Port mode using the TKP access protocol DTRPTKP::M	310
A.14	PICS proforma for DTR C-Port in Station Emulation mode using the TXI access protocol—DTRPSETXI::M.....	311
A.15	PICS proforma for C-Port operating in Station Emulation mode using the TKP access protocol DTRPSETKP::M.....	313
Annex K	(informative) DTR concentrator functional description	316
Annex L	(informative) DTR Station and C-Port in Station Emulation mode using the TXI access protocol—Join, Transmit, and Monitor low-level FSMs.....	367
Annex M	(informative) C-Port in Port mode using the TXI and TKP access protocol— C-Port Join, Transmit, and Monitor low-level FSMs	371
Annex N	(informative) C-Port in Port mode using the TKP access protocol— Transmit and Monitor low-level FSMs	376
Annex O	(informative) Channel considerations for 16 Mbit/s DTR.....	379
Annex Q	(informative) DTR Station using the TKP access protocol—Join, Transmit, and Monitor low-level FSMs.....	381
Annex R	(informative) C-Port in Station Emulation mode using the TKP access protocol— Join, Transmit, and Monitor low-level FSMs.....	385
Annex S	(informative) Clause 4 TKP access protocol deletions—C-Port in Port mode and in Station Emulation mode using the TKP access protocol	389
Annex T	(informative) Autodetection protocol	399

iTeh STANDARD PREVIEW
This page intentionally left blank
(standards.iteh.ai)

[ISO/IEC 8802-5:1998/Amd 1:1998](https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998)

<https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-d225ccf9fb58/iso-iec-8802-5-1998-amd-1-1998>

**Information technology—
Telecommunications and information
exchange between systems—
Local and metropolitan area networks—
Specific requirements—**

**Part 5: Token ring access method and physical
layer specifications**

**Amendment 1: Dedicated token ring operation
and fibre optic media**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

1. Changes to clauses 1 and 2 of ISO/IEC 8802-5 : 1998

<https://standards.iteh.ai/catalog/standards/sist/c9b1c567-e705-43bc-9723-4235c91586>

This standard, an amendment to the existing text of the ISO/IEC 8802-5 : 1998, specifies the requirements for dedicated token ring stations and ports. It also specifies characteristics of a fibre optic interface for connecting a 4 or 16 Mbit/s token ring station to the trunk coupling unit (TCU) of a token ring. The text assumes all material, including references, acronyms, and definitions contained in the base text. The clause and subclause numbering in the following clauses corresponds to the clause and subclause numbering to be expected in a combined document (i.e., when these additions are incorporated). Unaffected clauses are skipped.

Dedicated token ring (DTR) defines a new protocol for full-duplex token ring operation, sometimes referred to as “switching.” This amendment requires that all conformant DTR ports and stations be able to operate compatibly with the preexisting standard in a shared token ring environment.

The specification of token ring operation over fibre optic media, as defined within this amendment, replaces and renders obsolete ISO/IEC TR 11802-4 : 1994, Fibre optic station attachment.

1.1 Scope

Add the following to 1.1 after item q), and change the period after item q) to a semicolon:

- r) Defines the dedicated token ring (DTR) media access protocols, including finite state machines (FSMs) and state tables (clause 9);
- s) Defines the frame formats and MAC frames, timers, and error counters for the DTR Station and DTR C-Port (clause 10);