

norm**NEN-ISO/IEC 8327-1/A2**

Informatietechnologie - Onderlinge
verbinding van open systemen (OSI) -
Op de verbinding georiënteerd
sessieprotocol - Amendment 2:
Functionele eenheid van geneste
verbindingen (ISO/IEC 8327-1/A2:1998)

Information technology - Open Systems Interconnection -
Connection-oriented Session protocol - Protocol specification -
Amendment 2: Nested Connections Functional Unit
(ISO/IEC 8327-1/A2:1998)

januari 1999
ICS 35.100.50

Als Nederlands wijzigingsblad is aanvaard:

- ISO/IEC 8327-1:1996/A2:1998

Normcommissie 381 034 "Behandeling en uitwisseling van tekst"

Auteursrecht voorbehouden. Behoudens uitzondering door de wet gesteld mag zonder schriftelijke toestemming van het Nederlands Normalisatie-instituut niets uit deze uitgave worden veelevoudigd en/of openbaar gemaakt door middel van fotokopie, microfilm, opslag in computerbestanden of anderszins, hetgeen ook van toepassing is op gehele of gedeeltelijke bewerking.

Het Nederlands Normalisatie-instituut is met uitsluiting van ieder ander gerechtigd de door derden verschuldigde vergoedingen voor veelevoudiging te innen en/of daartoe in en buiten rechte op te treden, voor zover deze bevoegdheid niet is overgedragen c.q. rechtens toekomt aan de Stichting Reprorecht.

Hoewel bij deze uitgave de uiterste zorg is nagestreefd, kunnen fouten en onvolledigheden niet geheel worden uitgesloten. Het Nederlands Normalisatie-instituut en/of de leden van de commissies aanvaarden derhalve geen enkele aansprakelijkheid, ook niet voor directe of indirecte schade, ontstaan door of verband houdende met toepassing van door het Nederlands Normalisatie-instituut gepubliceerde uitgaven.

INTERNATIONAL
STANDARD

ISO/IEC
8327-1

Second edition
1996-09-15

AMENDMENT 2
1998-12-15

**Information technology — Open Systems
Interconnection — Connection-oriented
Session protocol: Protocol specification**

**AMENDMENT 2: Nested connections
functional unit**

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Protocole de session en mode connexion: Spécification du
protocole*

AMENDEMENT 2: Unité fonctionnelle de connexions nichée



Reference number
ISO/IEC 8327-1:1996/Amd.2:1998(E)

Foreword

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 2 to ISO/IEC 8327-1:1996 was prepared by ITU-T (as ITU-T Rec. X.225/Amd.2) and was adopted, under a special "fast-track procedure", by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC. The identical text is published as ITU-T Rec. X.225/Amd.2.

Copyright
Preview

© ISO/IEC 1998

All rights reserved. Unless otherwise specified, 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 publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –
CONNECTION-ORIENTED SESSION PROTOCOL:
PROTOCOL SPECIFICATION**

**AMENDMENT 2
Nested connections functional unit**

1) Subclause 2.1

Insert a new reference in numerical order:

- ITU-T Recommendation X.207 (1993) | ISO/IEC 9545:1994, *Information technology – Open Systems Interconnection – Application layer structure.*

NOTE – ITU-T Rec. X.207 | ISO/IEC 9545 is not essential for the application of this Recommendation | International Standard, but is included in the list of references as it has been referred to, for information, in relation to the applicability of the nested connections functional unit.

2) Subclause 3.2

Add after item i):

- j) nested session connection.
- k) nested session exception.

3) Subclause 5.6.10

Add to Table 3 a new row just before the Notes:

Nested connections		No additional associated SPDUs
--------------------	--	--------------------------------

4) New subclause 5.6.15

Add a new subclause as follows:

5.6.15 Nested Connections functional unit

The nested connections functional unit supports the use of nested session connections.

NOTE – Nested session connections enable a new Application Service Object specification (see ITU-T Rec. X.207 | ISO/IEC 9545) to specify the inclusion within the Object of an Application Service Object governed by an existing specification. The nested session connection permits the inner Application Service Object to have full and independent access to session services (through the use of presentation services) while enabling the outer Application Service Object specification, through actions on the containing connection to retain control of synchronization, resynchronization, and aborting. The sequence of primitives issued for nested connections and for enclosing connections is preserved by the session layer.

5) New subclause 5.8 bis

Add a new subclause just before 5.9 as follows:

5.8 bis Nested connection identifier

Each session connection has associated with it a nested connection identifier that is a value from 0 to 255 encoded as a single octet. The outermost session connection has the value zero implicitly associated.

When a nested connection is initiated, the initiator of that session connection assigns a nested connection identifier which is currently not in use for any nested connection (at any depth) on the transport connection to which the nested connection is assigned.

Nested connections initiated by the initiator of the transport connection have the most significant bit of the nested connection identifier set to one. Nested connections initiated by the responder of the transport connection have the most significant bit of the nested connection identifier set to zero.

The nested connection identifier is carried in all SPDUs issued as part of a nested connection. Additionally, the CONNECT SPDU carries a parent nested connection identifier that identifies the immediately enclosing session connection for the new connection.

6) Subclause 6.1.4

Insert after first paragraph of this subclause:

When the nested connections functional unit has been negotiated for a session connection, a new nested session connection may be assigned to the transport connection to which the existing connection has been assigned. This assignment occurs in the initiator SPM if and only if an S-CONNECT request primitive is issued at a connection end-point nested within an existing session connection end-point. It occurs in the responder SPM if a CONNECT SPDU is received in a transport connection on which a session connection is in progress, and results in the creation of a nested session connection end-point within the connection end-point of the parent session connection (as identified by the parent nested connection identifier in the CONNECT SPDU) and an S-CONNECT indication primitive at the new (nested) connection end-point.

Change the original fourth paragraph (beginning Only the initiator ...) of this subclause:

Only the initiator of a transport connection is permitted to issue the CONNECT SPDU when there is no session connection on that transport connection. Where the nested connections functional unit has been agreed, both the initiator and the responder can issue the CONNECT SPDU for a nested session connection.

Change the original fifth paragraph (beginning When a session connection ...) of this subclause:

When a session connection is terminated, all nested connections which are not yet terminated are terminated with a session provider abort. When the outermost session connection is terminated, the underlying transport connection is also terminated, unless reuse of the transport connection has been agreed.

7) New subclause 6.3.8

Add a new subclause as follows:

6.3.8 Processing order of SPDUs on nested connections

The sequence of primitive events on a nested connection in relation to events on enclosing connections shall be preserved in the transfer of the corresponding SPDUs, and in the issue of corresponding service primitives.

Where the SPM of any connection enclosing a nested connection is discarding DATA SPDUs, all SPDUs on the nested connection shall be discarded, and a nested session exception occurs for the nested connection if any SPDUs are discarded for this reason. Where the SPM of any connection enclosing a nested connection is deferring the passing of primitives (as the result of a received SPDU on the expedited path) to the service user, it shall also defer the processing of SPDUs for a nested connection which are received on the expedited path.

NOTE – The service definition prevents the issue of any service primitives on a nested session connection unless an S-DATA primitive can be issued at that time on all enclosing session connections. It is the responsibility of enclosing application service object specifications to ensure that such states are entered in a timely manner to support the needs of any embedded application service object specification.

8) Subclause 6.5

Add at the end of this subclause:

NOTE – If such flow control is exercised, it affects all session connections that are assigned to this transport connection.

9) Subclause 7.1

Change this subclause to read:

The CONNECT SPDU is transmitted by the initiator of the transport connection (or in the case of a nested session connection, by either the initiator or the responder of the transport connection) on a previously assigned transport connection in order to initiate a session connection.

10) Subclause 7.1.1

Add a sentence to the end of 7.1.1 d):

For nested session connections, the service primitive does not contain corresponding parameters, and these parameters are absent in the protocol.

Add two new items at the end of 7.1.1:

- g) For a nested session connection only, a parent nested connection identifier parameter which identifies the parent session connection.
- h) For a nested session connection only, the nested connection identifier parameter assigned to this connection.

11) Subclause 7.2.1

Add at the end of this subclause:

- c) For a nested session connection only, the nested connection identifier parameter assigned to this connection.

12) Subclause 7.3.1

Add at the end of this subclause:

- c) for a nested session connection only, the nested connection identifier parameter assigned to this connection.

13) Subclause 7.4.1

Add a sentence to the end of 7.4.1 f):

For nested session connections, the service primitive does not contain corresponding parameters, and these parameters are absent in the protocol.

Add a new item h) as follows:

- h) For a nested session connection only, the nested connection identifier parameter assigned to this connection.

14) Subclause 7.5.1

Add at the end of this subclause:

- g) For a nested session connection only, the nested connection identifier parameter assigned to this connection.

NOTE – For a nested connection, the transport disconnect parameter shall always be set to indicate retention of the transport connection.

Bestelformulier

NEN

Stuur naar:

NEN Uitgeverij
t.a.v. afdeling Marketing
Antwoordnummer 10214
2600 WB Delft

NEN Uitgeverij

Postbus 5059
2600 GB Delft

Vlinderweg 6
2623 AX Delft

T (015) 2 690 390
F (015) 2 690 271

www.nen.nl/normshop

Ja, ik bestel

__ ex. NEN-ISO/IEC 8327-1:1997/A2:1999 en Informatietechnologie - € 48.19
Onderlinge verbinding van open systemen (OSI) - Op de verbinding
georiënteerd sessieprotocol - Amendment 2: Functionele eenheid van
geneste verbindingen

**Wilt u deze norm in PDF-formaat? Deze bestelt u eenvoudig via
www.nen.nl/normshop**

Stel uw vraag aan
Klantenservice via:

[@NEN_webcare](https://twitter.com/NEN_webcare)

Gratis e-mailnieuwsbrieven

Wilt u op de hoogte blijven van de laatste ontwikkelingen op het gebied van normen,
normalisatie en regelgeving? Neem dan een gratis abonnement op een van onze
e-mailnieuwsbrieven. www.nen.nl/nieuwsbrieven

Retourneren

Fax: (015) 2 690 271
E-mail: marketing@nen.nl
Post: NEN Uitgeverij,
t.a.v. afdeling Marketing
Antwoordnummer 10214,
2600 WB Delft
(geen postzegel nodig).

Gegevens

Bedrijf / Instelling

T.a.v. _____ O M O V

E-mail

Klantnummer NEN

Uw ordernummer _____ BTW nummer _____

Postbus / Adres

Postcode _____ Plaats _____

Telefoon _____ Fax _____

Factuuradres (indien dit afwijkt van bovenstaand adres)

Postbus / Adres

Postcode _____ Plaats _____

Datum _____ Handtekening _____

Voorwaarden

- De prijzen zijn geldig tot 31 december 2015, tenzij anders aangegeven.
- Alle prijzen zijn excl. btw, verzend- en handelingskosten en onder voorbehoud bij o.m. ISO- en IEC-normen.
- Bestelt u via de normshop een pdf, dan betaalt u geen handeling en verzendkosten.
- Meer informatie: telefoon (015) 2 690 391, dagelijks van 8.30 tot 17.00 uur.
- Wijzigingen en typfouten in teksten en prijsinformatie voorbehouden.
- U kunt onze algemene voorwaarden terugvinden op: www.nen.nl/leveringsvoorwaarden.