JTC 1

INTERNATIONAL STANDARD

ISO/IEC 10737

First edition
1994-10-01

AMENDMENT 1
1994-12-15

Information technology — Telecommunications and information exchange between systems — Elements of Management Information Related to OSI Transport Layer Standards

AMENDMENT 1: NCMS Management

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Éléments d'information de gestion concernant les normes de la couche Transport OSI

AMENDEMENT 1: Gestion de NCMS

Reference number
ISO/IEC 10737:1994/Amd.1:1994(E)

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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 1 to International Standard ISO/IEC 10737:1994 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology.*

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Introduction

ISO/IEC 10737 specifies the elements of management information relating to OSI Transport Layer service and protocol described in ISO/IEC 8072 and ISO/IEC 8073. However the management information relating to Network Connection Management Subprotocol (NCMS) is not included.

This amendment adds to ISO/IEC 10737 the elements of management information relating to NCMS described in annex B of ISO/IEC 8073.

This amendment has a structure which is similar to that of ISO/IEC 10737 in order to facilitate cross reference between the two documents.

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Information technology — Telecommunications and information exchange between systems — Elements of Management Information Related to OSI Transport Layer Standards

AMENDMENT 1: NCMS Management

4 Symbols and Abbreviations

Insert the following symbols and abbreviations after MO:

NC	Network Connection
NCC	Network Connection Control
NCMS	Network Connection Management Subprotocol

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5 Elements of Transport Layer Management Information

5.1 Managed Object Hierarchy

5.1.1 Summary of Managed Objects

Add the following new items after item g):

h) NCMS Protocol Machine management object (ncmsPM,clause 5.9)
i) NetworkConnection Control managed object (ncc,clause 5.10.1)
j) NetworkConnection Control Initial Value managed object (nccIV,clause 5.10.2)

Replace figure 1 by the following figure:

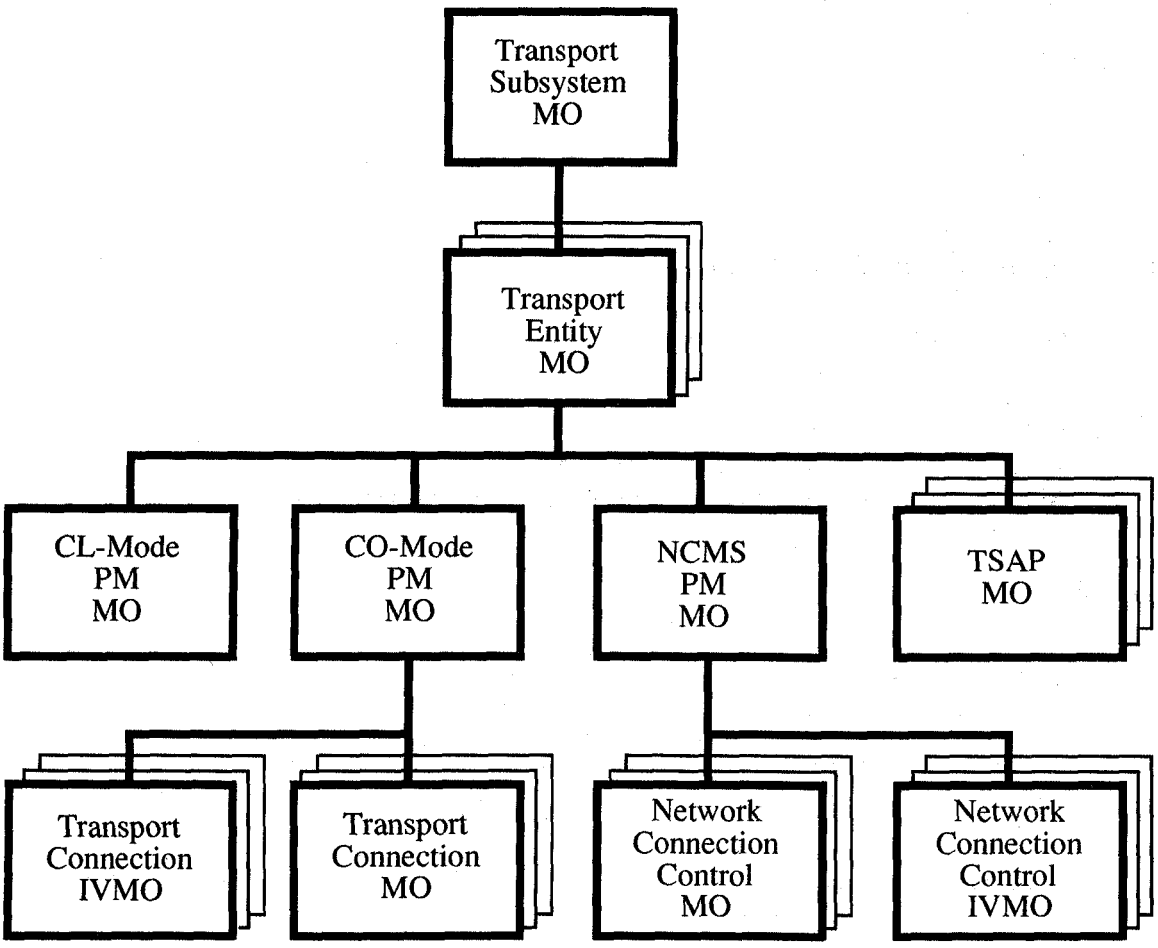

Figure 1-Transport Layer Containment Hierarchy

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Add the following new subclause 5.9:

5.9 NCMS Protocol Machine

```
ncmsPM MANAGED OBJECT CLASS
   DERIVED FROM "DMI":top;
   CHARACTERIZED BY ncmsPM-P PACKAGE
      BEHAVIOUR
      commonCreationDeletion-B,
      commonStateChange-B,
     ncmsPMPackageImportedNotificatuions-B,
      ncmsPM-B BEHAVIOR
      DEFINED AS
         !This managed object class represents the part of transport entity that performs the
          NCMS protocol.
          Only one instance of this managed object class may exist within a TEMO instance.!
      ;
   ;

   ATTRIBUTES
      ncmsPMId GET,
      "DMI":administrativeState GET-REPLACE,
      "DMI":operationalState GET;
   ACTIONS
      "GMI":activate,
      "GMI":deactivate;

   NOTIFICATIONS
      "DMI":communicationsAlarm,
         ncmsPMPDUHeader,
         ncmsPMSourceAddress,
      "DMI":objectCreation,
      "DMI":objectDeletion,
      "DMI":stateChange
   ;
;
REGISTERED AS{TLM.moi ncmsPM (8)};
```

--- Behaviours

```
ncmsPMPackageImportedNotifications-B BEHAVIOUR
    DEFINED AS
        !The ncmsPM-P package imports communicationsAlarm from DMI, in order to report
        the failure of NC sharing. The probableCause is set to
        TLM.communicationsProtocolError. The ncmsPMPDUHeader and ncmsPMSourceAddress
        are reported as parameters in the additionalInformation field of the communicationsAlarm.
        The significance subparameter of each item of the additionalInformation shall be set to the
        value 'False' (i.e. not significant) so that a managing system receiving the event will be less
        likely to reject it. The perceivedSeverity shall be set to Minor.
        A subsequent communicationsAlarm with a perceived Severity value of 'Cleared' shall not
        be generated. No other fields or parameters shall be used, with the exception of further parameters
        in the additionalInformation field.!
    ;
```


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--- Name Bindings

```
ncmsPM-transportEntity-Management NAME BINDING
   SUBORDINATE OBJECT CLASS ncmsPM AND SUBCLASSES;
   NAMED BY
      SUPERIOR OBJECT CLASS transportEntity AND SUBCLASSES;
      WITH ATTRIBUTE ncmsPMId;
   BEHAVIOUR
      ncmsPM-transportEntity-B BEHAVIOUR
      DEFINED AS
         !The name binding that applies when the ncmsPM managed object is explicitly created
          by management.!
      ;
   ;
   CREATE;
   DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
REGISTERED AS{TLM.nboi ncmsPM-transportEntity-Management (13)};
```

```
ncmsPM-transportEntity-Automatic NAME BINDING
   SUBORDINATE OBJECT CLASS ncmsPM AND SUBCLASSES;
   NAMED BY
      SUPERIOR OBJECT CLASS transportEntity AND SUBCLASSES;
      WITH ATTRIBUTE ncmsPMId;
   BEHAVIOUR
      ncmsPM-transportEntity-B BEHAVIOUR
      DEFINED AS
         !The name binding that applies when the ncmsPM managed object is created .
         The name binding that applies when the ncmsPM managed object can not be explicitly
         created by management.!
      ;
   ;
REGISTERED AS{TLM.nboi ncmsPM-transportEntity-Automatic (14)};
```

--- Attribute

```
ncmsPMId ATTRIBUTE
   WITH ATTRIBUTE SYNTAX ASN1DefinedTypesModule.NameSyntax;
   MATCHES FOR EQUALITY;
   BEHAVIOUR
      ncmsPMId-B BEHAVIOUR
      DEFINED AS
         !The attribute that is used in naming instances of the ncms Protocol Machine
         managed object class.!
      ;
   ;
REGISTERED AS{TLM.aoi ncmsPMId (67)};
```


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