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ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

X.722

Amendment 2
(08/97)

SERIES X: DATA NETWORKS AND OPEN SYSTEM
COMMUNICATION

OSI management – Structure of Management Information

Information technology – Open Systems
Interconnection – Structure of management
information: Guidelines for the definition of
managed objects

**Amendment 2: Addition of the NO-MODIFY
syntax element and guidelines extension**

ITU-T Recommendation X.722 – Amendment 2

(Previously CCITT Recommendation)

ITU-T X-SERIES RECOMMENDATIONS
DATA NETWORKS AND OPEN SYSTEM COMMUNICATION

PUBLIC DATA NETWORKS	X.1-X.199
Services and facilities	X.1-X.19
Interfaces	X.20-X.49
Transmission, signalling and switching	X.50-X.89
Network aspects	X.90-X.149
Maintenance	X.150-X.179
Administrative arrangements	X.180-X.199
OPEN SYSTEM INTERCONNECTION	X.200-X.299
Model and notation	X.200-X.209
Service definitions	X.210-X.219
Connection-mode protocol specifications	X.220-X.229
Connectionless-mode protocol specifications	X.230-X.239
PICS proformas	X.240-X.259
Protocol Identification	X.260-X.269
Security Protocols	X.270-X.279
Layer Managed Objects	X.280-X.289
Conformance testing	X.290-X.299
INTERWORKING BETWEEN NETWORKS	X.300-X.399
General	X.300-X.349
Satellite data transmission systems	X.350-X.399
MESSAGE HANDLING SYSTEMS	X.400-X.499
DIRECTORY	X.500-X.599
OSI NETWORKING AND SYSTEM ASPECTS	X.600-X.699
Networking	X.600-X.629
Efficiency	X.630-X.649
Naming, Addressing and Registration	X.650-X.679
Abstract Syntax Notation One (ASN.1)	X.680-X.699
OSI MANAGEMENT	X.700-X.799
Systems Management framework and architecture	X.700-X.709
Management Communication Service and Protocol	X.710-X.719
Structure of Management Information	X.720-X.729
Management functions	X.730-X.799
SECURITY	X.800-X.849
OSI APPLICATIONS	X.850-X.899
Commitment, Concurrency and Recovery	X.850-X.859
Transaction processing	X.860-X.879
Remote operations	X.880-X.899
OPEN DISTRIBUTED PROCESSING	X.900-X.999

For further details, please refer to ITU-T List of Recommendations.

INTERNATIONAL STANDARD 10165-4**ITU-T RECOMMENDATION X.722****INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –
STRUCTURE OF MANAGEMENT INFORMATION: GUIDELINES FOR
THE DEFINITION OF MANAGED OBJECTS****AMENDMENT 2****Addition of the NO-MODIFY syntax element and guidelines extension****Summary**

This Amendment to CCITT Rec. X.722 | ISO/IEC 10165-4, the Guidelines for Definition of Managed Objects, covers two topics.

One topic of the amendment is the specification of a NO-MODIFY syntax element to the GDMO Package Templates.

The other topic of the amendment is a guidelines extension which describes rules for specifications of management information based on the X.700-Series to evolve to the use of ASN.1:1994 from ASN.1:1990. The guidelines extension provides a common and consistent means to do this, so that product developers are provided with a single way to specify use of ASN.1:1994 in the Recommendations they implement.

Source

The ITU-T Recommendation X.722, Amendment 2 was approved on the 9th of August 1997. The identical text is also published as ISO/IEC International Standard 10165-4.

FOREWORD

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The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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CONTENTS

	<i>Page</i>
1) Subclause 2.1	1
2) Subclause 8.2	1
3) Subclause 8.4.2	1
4) Subclause 8.4.3.2	1
5) Index.....	2
6) New clause 9	2
7) New clause 10	7

Introduction

This Amendment adds the NO-MODIFY syntax element to the attribute properties of the package template in order to clearly specify that an attribute cannot be modified in subclasses and compatible classes of the managed object class.

This Amendment proposes that the **use of ASN.1:1994 should not be forbidden** (i.e. normative specification of ASN.1:1994 may be employed) in new and developing OSI Systems Management standards for the following reasons:

- ASN.1:1990 bugs/defects;
- ASN.1:1994 enhancements.

ASN.1:1990 and ASN.1:1994 modules can be mixed and are completely compatible using the guidelines in A.2 of Rec. ITU-T X.680 | ISO/IEC 8824-1, ASN.1 Specification of Basic Notation. This "mixed mode" use of ASN.1 places certain restrictions on allowed productions of both ASN.1:1990 and ASN.1:1994. If these guidelines are maintained, not only are ASN.1:1990 and ASN.1:1994 completely compatible, they are virtually indistinguishable and have identical encoding. Using these guidelines, new and developing OSI Systems Management standards may use both ASN.1:1990 and ASN.1:1994 for normative specification of syntax.

This Amendment introduces conventions for the specification of ASN.1 and GDMO directives in order to clearly identify specification and user options associated with ASN.1 modules and GDMO templates.