INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Corrigendum 1
X.680
(11/95)

DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS

OSI NETWORKING AND SYSTEM ASPECTS – ABSTRACT SYNTAX NOTATION ONE (ASN.1)

INFORMATION TECHNOLOGY – ABSTRACT SYNTAX NOTATION ONE (ASN.1): SPECIFICATION OF BASIC NOTATION

TECHNICAL CORRIGENDUM 1

Corrigendum 1 to
ITU-T Recommendation X.680

(Previously "CCITT Recommendation")

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. Some 179 member countries, 84 telecom operating entities, 145 scientific and industrial organizations and 38 international organizations participate in ITU-T which is the body which sets world telecommunications standards (Recommendations).

The approval of Recommendations by the Members of ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, 1993). In addition, the World Telecommunication Standardization Conference (WTSC), which meets every four years, approves Recommendations submitted to it and establishes the study programme for the following period.

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. The text of ITU-T Recommendation X.680, Corrigendum 1, was approved on 21st of November 1995. The identical text is also published as ISO/IEC International Standard 8824-1.

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NOTE

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

ITU-T X-SERIES RECOMMENDATIONS

DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS

(February 1994)

ORGANIZATION OF X-SERIES RECOMMENDATIONS

Subject area	Recommendation Series
PUBLIC DATA NETWORKS	
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 SYSTEMS INTERCONNECTION	
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	
General	X.300-X.349
Mobile Data Transmission Systems	X.350-X.369
Management	X.370-X.399
MESSAGE HANDLING SYSTEMS	X.400-X.499
DIRECTORY	X.500-X.599
OSI NETWORKING AND SYSTEM ASPECTS	
Networking	X.600-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
SECURITY	X.800-X.849
OSI APPLICATIONS	
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

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CONTENTS

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Summary

This technical corrigendum to Rec. X.680 | ISO/IEC 8824-1 describes, through an example, how the ASN.1 types BMPString or UniversalString can be restricted to exclude all control functions by use of the subtype notation. It is based on the disposition of defect Report 8824-1/031. It also corrects editorial errors having to do with "COMPONENTS OF" in Rec. X.680/Amd.1 | ISO/IEC 8824-1/Amd.1.

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY − ABSTRACT SYNTAX NOTATION ONE (ASN.1): SPECIFICATION OF BASIC NOTATION

TECHNICAL CORRIGENDUM 1

1)   Subclause G.2.6 of Rec. X.680 | ISO/IEC 8824-1

Insert a new subclause G.2.6 as shown below:

G.2.6   A BMPString or UniversalString can be restricted to exclude all control functions by use of the subtype notation as follows:

> **VanillaBMPString ::= BMPString(FROM (ALL EXCEPT ({0,0,0,0}..{0,0,0,31} | {0,0,0,128}..{0,0,0,159})))**

or equivalently:

> **C0 ::= BMPString (FROM ({0,0,0,0} .. {0,0,0,31}))** -- *C0 control functions*
> **C1 ::= BMPString (FROM ({0,0,0,128} .. {0,0,0,159}))** -- *C1 control functions*
> **VanillaBMPString ::= BMPString (FROM (ALL EXCEPT (C0 | C1)))**

2)   Subclause 11 of Rec. X.680/Amd.1 | ISO/IEC 8824-1/Amd.1 (Page 5)

Starting at line 11, change from:

> *{Replace the **first sentence** of 22.4 with the following:}*

> "Type" in the "COMPONENTS OF Type" notation shall be a sequence type that itself contains no extension marker, but it may include components that do.

to:

> "Type" in the "COMPONENTS OF Type" notation shall be a sequence type. If "Type" in the "COMPONENTS OF Type" contains an extension marker, the extension marker is not visible to the "COMPONENTS OF Type". Thus, for the purposes of the "COMPONENTS OF Type", the "Type" is treated as though it was not defined with an extension marker.

Starting at line 12, change from:

> *{Replace the **first sentence** of 24.2 with the following:}*

> If a "Type" contains an extension marker and that "Type" is used as the "Type" in a "COMPONENTS OF Type", the extension marker is not visible to the "COMPONENTS OF Type". Thus, for the purposes of the "COMPONENTS OF Type" the "Type" is treated as though it was not defined with an extension marker.

to:

> "Type" in the fourth alternative of the "ComponentType" (see 22.1) shall be a set type. If "Type" in the "COMPONENTS OF Type" contains an extension marker, the extension marker is not visible to the "COMPONENTS OF Type". Thus, for the purposes of the "COMPONENTS OF Type" the "Type" is treated as though it was not defined with an extension marker.

Starting at line 30, change from:

> *{Modify clause 24.4 to say:}*

> **24.4**   Subclauses 22.2, 22.2 *bis* and 22.6-22.10 also apply to set types.

to:

> **24.4**   Subclauses 22.2, 22.3, 22.4 *bis* and 22.6-22.10 also apply to set types.