



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**X.682**

**Corrigendum 2**  
(02/2001)

SERIES X: 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): Constraint specification

**Technical Corrigendum 2**

ITU-T Recommendation X.682 (1997) – Corrigendum 2

(Formerly CCITT Recommendation)

---

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

<b>PUBLIC DATA NETWORKS</b>	
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
<b>OPEN SYSTEMS INTERCONNECTION</b>	
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
<b>INTERWORKING BETWEEN NETWORKS</b>	
General	X.300–X.349
Satellite data transmission systems	X.350–X.369
IP-based networks	X.370–X.399
MESSAGE HANDLING SYSTEMS	X.400–X.499
DIRECTORY	X.500–X.599
<b>OSI NETWORKING AND SYSTEM ASPECTS</b>	
Networking	X.600–X.629
Efficiency	X.630–X.639
Quality of service	X.640–X.649
Naming, Addressing and Registration	X.650–X.679
<b>Abstract Syntax Notation One (ASN.1)</b>	<b>X.680–X.699</b>
<b>OSI MANAGEMENT</b>	
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 and ODMA functions	X.730–X.799
SECURITY	X.800–X.849
<b>OSI APPLICATIONS</b>	
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 the list of ITU-T Recommendations.*

**INTERNATIONAL STANDARD ISO/IEC 8824-3  
ITU-T RECOMMENDATION X.682**

**Information technology – Abstract Syntax Notation One (ASN.1):  
Constraint specification**

**TECHNICAL CORRIGENDUM 2**

**Source**

Corrigendum 2 to ITU-T Recommendation X.682 (1997) was prepared by ITU-T Study Group 7 (2001-2004) and approved on 2 February 2001. An identical text is also published as Technical Corrigendum 2 to ISO/IEC 8824-3.

## FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 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.

## INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

© ITU 2002

All rights reserved. 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 ITU.

## CONTENTS

	<i>Page</i>
1) Subclause 7.1 .....	1
2) Subclause 8.1 .....	1
3) Subclause 8.2 .....	1
4) Clause 11 .....	1
5) Annex B.....	2



## INTERNATIONAL STANDARD

## ITU-T RECOMMENDATION

**Information technology – Abstract Syntax Notation One (ASN.1):  
Constraint specification**

**TECHNICAL CORRIGENDUM 2**

**1) Subclause 7.1**

*Add the reserved words "CONTAINING" and "ENCODED" to the list of reserved words.*

**2) Subclause 8.1**

*Replace the BNF with the following:*

```

GeneralConstraint ::=
    UserDefinedConstraint   |
    TableConstraint         |
    ContentsConstraint

```

**3) Subclause 8.2**

*Add a list item "c)" as follows:*

c) "ContentsConstraint", in clause 11.

**4) Clause 11**

*Create clause 11 as follows:*

**11 Contents Constraints**

**11.1** A contents constraint is specified by the syntax:

```

ContentsConstraint ::=
    CONTAINING Type |
    ENCODED BY Value |
    CONTAINING Type ENCODED BY Value

```

**11.2** "Value" shall be a value of type object identifier.

**11.3** The "ContentsConstraint" can only be applied to octet string types and bit string types. Such constrained types shall not have further constraints applied to them, either directly or through the use of "typereference" names.

**11.4** The first and third alternatives of "ContentsConstraint" specify that the abstract value of the octet string or bit string is an encoding of the "Type". In the first alternative, the Encoding Rules applied to "Type" shall be the same as those applied to the octet string or bit string.

**11.5** The second and third alternatives of "ContentsConstraint" specify that the abstract value of the octet string or bit string is the encoding produced by the Encoding Rules identified by the object identifier value, "Value".

5) Annex B

Replace the line beginning with "**GeneralConstraint ::=**" with:

**GeneralConstraint ::= UserDefinedConstraint | TableConstraint | ContentsConstraint**

Add the following at the end of the annex:

**ContentsConstraint ::=**  
**CONTAINING Type |**  
**ENCODED BY Value |**  
**CONTAINING Type ENCODED BY Value**





## SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series B	Means of expression: definitions, symbols, classification
Series C	General telecommunication statistics
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Telephone transmission quality, telephone installations, local line networks
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
<b>Series X</b>	<b>Data networks and open system communications</b>
Series Y	Global information infrastructure and Internet protocol aspects
Series Z	Languages and general software aspects for telecommunication systems