TELECOMMUNICATION STANDARDIZATION SECTOR

OF ITU

X.680 Corrigendum 4 (03/2001)

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): Specification of basic notation

Technical Corrigendum 4

ITU-T Recommendation X.680 (1997) - Corrigendum 4

(Formerly CCITT Recommendation)

ITU-T X-SERIES RECOMMENDATIONS

DATA NETWORKS AND OPEN SYSTEM COMMUNICATIONS

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
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
OSI NETWORKING AND SYSTEM ASPECTS	
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
Abstract Syntax Notation One (ASN.1)	X.680-X.699
OSI MANAGEMENT	
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
OSI APPLICATIONS	
Commitment, Concurrency and Recovery	X.850-X.859
Transaction processing	X.860-X.879
Domata aparations	X.880-X.899
Remote operations OPEN DISTRIBUTED PROCESSING	1.000 1.07)

 $For {\it further details, please refer to the list of ITU-T Recommendations}.$

INTERNATIONAL STANDARD ISO/IEC 8824-1 ITU-T RECOMMENDATION X.680

Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation

TECHNICAL CO	ORRIGENDUM 4
--------------	--------------

Summary
This Technical Corrigendum to ITU-T Rec. X.680 ISO/IEC 8824-1 adds the ability to more easily create multi-line
comments.

Source

Corrigendum 4 to ITU-T Recommendation X.680 (1997) was prepared by ITU-T Study Group 7 (2001-2004) and approved on 15 March 2001. An identical text is also published as Technical Corrigendum 4 to ISO/IEC 8824-1.

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

		Page
1)	Table 2 of subclause 10.1	1
2)	Subclause 11.6.1 bis	1
3)	Subclause 11.6.2.	1
4)	Clause 11 6 3	1

INTERNATIONAL STANDARD ITU-T RECOMMENDATION

Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation

TECHNICAL CORRIGENDUM 4

1) Table 2 of subclause 10.1

Add the character "/" to the last row of Table 2 of subclause 10.1.

2) Subclause 11.6.1 *bis*

Add a new subclause 11.6.1 bis after subclause 11.6.1 as follows:

- **11.6.1** *bis* The lexical item "comment" can have two forms:
 - One-line comments which begin with "--" as explained in 11.6.2;
 - Multiple-line comments which begin with "/*" as explained in 11.6.3.

3) Subclause 11.6.2

Replace subclause 11.6.2 with:

11.6.2 Whenever a "comment" begins with a pair of adjacent hyphens, it shall end with the next pair of adjacent hyphens or at the end of the line, whichever occurs first. A comment shall not contain a pair of adjacent hyphens other than the pair which starts it and the pair, if any, which ends it. If a comment beginning with "--" includes the adjacent characters "/*" or "*/", these have no special meaning and are considered part of the comment. The comment may include graphic symbols which are not in the character set specified in 10.1 (see 10.3).

4) Clause 11.6.3

Add a new subclause 11.6.3 as follows:

11.6.3 Whenever a "comment" begins with "/*", it shall end with a corresponding "*/", whether this "*/" is on the same line or not. If another "/*" is found before a "*/", then the comment terminates when a matching "*/" has been found for each "/*". If a comment beginning with "/*" includes two adjacent hyphens "--", these hyphens have no special meaning and are considered part of the comment. The comment may include graphic symbols which are not in the character set specified in 10.1 (see 10.3).

NOTE – This allows the user to comment parts of an ASN.1 module that already contain comments (whether they begin with "--" or "/*") by simply inserting "/*" at the beginning of the part to be commented and "*/" at its end.

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
Series X	Data networks and open system communications
Series Y	Global information infrastructure and Internet protocol aspects
Series Z	Languages and general software aspects for telecommunication systems