# ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

# X.681
## Corrigendum 1
(06/2006)

SERIES X: DATA NETWORKS, OPEN SYSTEM COMMUNICATIONS AND SECURITY

OSI networking and system aspects – Abstract Syntax Notation One (ASN.1)

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

**Technical Corrigendum 1**

ITU-T Recommendation X.681 (2002) – Technical Corrigendum 1

ITU-T  X-SERIES  RECOMMENDATIONS

**DATA NETWORKS, OPEN SYSTEM COMMUNICATIONS AND SECURITY**

| | |
|---|---|
| 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.379 |
| 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 |
| Remote operations | X.880–X.889 |
| Generic applications of ASN.1 | X.890–X.899 |
| OPEN DISTRIBUTED PROCESSING | X.900–X.999 |
| TELECOMMUNICATION SECURITY | X.1000– |

*For further details, please refer to the list of ITU-T Recommendations.*

**INTERNATIONAL STANDARD ISO/IEC 8824-2**
**ITU-T RECOMMENDATION X.681**


# Information technology – Abstract Syntax Notation One (ASN.1):
# Information object specification


## Technical Corrigendum 1

## Summary

This Technical Corrigendum addresses a defect in ITU-T Rec. X.681 | ISO/IEC 8824-2 that was identified when resolving ballot comments on ITU-T Rec. X.680 (2002)/Amd.3 | ISO/IEC 8824-1:2002/Amd.3 (time types amendment).

The time types amendment has (*inter alia*) added new built-in type reference names to ITU-T Rec. X.680 | ISO/IEC 8824-1, but there is a copy of built-in ASN.1 type reference names in ITU-T Rec. X.681 | ISO/IEC 8824-2, 10.6, preventing the use of such names as a "Literal" in order to avoid ambiguity. This list needs to be updated to include the new built-in time type reference names.

This Technical Corrigendum updates the list in ITU-T Rec. X.681 | ISO/IEC 8824-2, 10.6, and also corrects a cross-reference to ITU-T Rec. X.680 | ISO/IEC 8824-1 which was also noted to be in error.

# 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.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure e.g. interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met.  The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

# 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.

**INTERNATIONAL STANDARD**
**ITU-T RECOMMENDATION**

# Information technology – Abstract Syntax Notation One (ASN.1): Information object specification

## Technical Corrigendum 1

### 1) Clause 10.6

*Add the following "word" tokens to the list in 10.6, in their alphabetical position:*

```
DATE
DATE-TIME
DURATION
TIME
TIME-OF-DAY
```

### 2) Clause 7.9

*Change the reference in 7.9 from:*

ITU-T Rec. X.680 | ISO/IEC 8824-1, 11.2

*to:*

ITU-T Rec. X.680 | ISO/IEC 8824-1, 11.2.1

# SERIES OF ITU-T RECOMMENDATIONS

| | |
|---|---|
| Series A | Organization of the work of ITU-T |
| 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 | Telecommunication management, including TMN and network maintenance |
| 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, open system communications and security** |
| Series Y | Global information infrastructure, Internet protocol aspects and next-generation networks |
| Series Z | Languages and general software aspects for telecommunication systems |