



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**X.681**

**Amendment 1**  
(06/99)

SERIES X: DATA NETWORKS AND OPEN SYSTEM  
COMMUNICATIONS

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

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

**Amendment 1: ASN.1 semantic model**

ITU-T Recommendation X.681 – Amendment 1

(Previously CCITT Recommendation)

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**INTERNATIONAL STANDARD 8824-2**

**ITU-T RECOMMENDATION X.681**

**INFORMATION TECHNOLOGY –  
ABSTRACT SYNTAX NOTATION ONE (ASN.1):  
INFORMATION OBJECT SPECIFICATION**

**AMENDMENT 1  
ASN.1 semantic model**

**Summary**

Amendment 1 to ITU-T Rec. X.681 | ISO/IEC 8824-2 is expected to be mainly of use to tool builders. It is meant to ensure that they interpret the ASN.1 standard identically as far as references to information objects and information object sets is concerned.

**Source**

Amendment 1 to the ITU-T Recommendation X.681 was approved on the 18th of June 1999. The identical text is also published as ISO/IEC International Standard 8824-2.

## 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. The 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 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

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INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY –  
ABSTRACT SYNTAX NOTATION ONE (ASN.1):  
INFORMATION OBJECT SPECIFICATION**

**AMENDMENT 1  
ASN.1 semantic model**

**1) Subclause 3.4**

*Add the definition 3.4.6 bis as follows:*

**3.4.6 bis governing; governor (class):** An information object class definition or reference which affects the interpretation of a part of the ASN.1 syntax, requiring it to reference information objects of the governor class.

**2) New subclause 8.1 bis**

*Add a new subclause after 8.1 as follows:*

**8.1 bis** References to information objects or information object sets are controlled by a governor class. It is a requirement that the referenced information object and the information objects in the referenced information object set shall be of the governor class. There is no equivalent of "value mappings" specified for information objects, so the above statement means that the information object or information object set must have been defined using the same information object class reference as is used as the governor (or one obtained from it by simple reference assignment). Two identical (but textually distinct) instances of the information object class notation do **NOT** identify the same information object class for the purposes of this requirement.

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