INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

X.683
Amendment 1
(06/99)

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): Parameterization of ASN.1 specifications

Amendment 1: ASN.1 semantic model

ITU-T Recommendation X.683 – Amendment 1

(Previously CCITT Recommendation)

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INTERNATIONAL STANDARD 8824-4

ITU-T RECOMMENDATION X.683

INFORMATION TECHNOLOGY –
ABSTRACT SYNTAX NOTATION ONE (ASN.1):
PARAMETERIZATION OF ASN.1 SPECIFICATIONS

AMENDMENT 1
ASN.1 semantic model

Summary

Amendment 1 to ITU-T Rec. X.683 | ISO/IEC 8824-4 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 actual and dummy parameters of parameterized types are concerned.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommuni-cations. 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

In this Recommendation the term *recognized operating agency (ROA)* includes any individual, company, corporation or governmental organization that operates a public correspondence service. The terms *Administration, ROA* and *public correspondence* are defined in the *Constitution of the ITU (Geneva, 1992)*.

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The 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, the 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.

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ABSTRACT SYNTAX NOTATION ONE (ASN.1):
PARAMETERIZATION OF ASN.1 SPECIFICATIONS**

**AMENDMENT 1
ASN.1 semantic model**

1) New subclauses 8.12 and 8.13

Add two new subclauses after 8.11 as follows:

8.12 When a value or value set is supplied to a parameterized type as an actual parameter, the type of the actual parameter is required to be compatible with the governor of the corresponding dummy parameter. (See ITU-T Rec. X.680 | ISO/IEC 8824-1, subclauses F.6.2 and F.6.3 for details.)

8.13 In defining a parameterized type with a value or a value set dummy parameter, the type used to govern that dummy parameter shall be a type, **all** of whose values are valid for use in all places to the right of the assignment where the dummy parameter is used. (See ITU-T Rec. X.680 | ISO/IEC 8824-1, subclause F.6.5 for details.)

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