



Information technology — ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Règles de codage ASN.1: Spécifications pour les règles de base de codage (BER), les règles canoniques de codage (CER) et les règles de distinction de codage (DER)

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to International Standard ISO/IEC 8825-1:1995 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 21, *Open systems interconnection, data management and open distributed processing*.

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY – ASN.1 ENCODING RULES:
SPECIFICATION OF BASIC ENCODING RULES (BER), CANONICAL ENCODING
RULES (CER) AND DISTINGUISHED ENCODING RULES (DER)**

TECHNICAL CORRIGENDUM 1

1) Subclause 8.20.7

Replace the text with the following:

For the "UniversalString" type, the octet string shall contain the octets specified in ISO/IEC 10646-1, using the 4-octet canonical form (see 14.2 of ISO/IEC 10646-1). Signatures shall not be used. Control functions may be used provided they satisfy the restrictions imposed by subclause 8.20.9.

2) Subclause 8.20.8

Replace the text with the following:

For the "BMPString" type, the octet string shall contain the octets specified in ISO/IEC 10646-1, using the 2-octet BMP form (see 14.1 of ISO/IEC 10646-1). Signatures shall not be used. Control functions may be used provided they satisfy the restrictions imposed by subclause 8.20.9.

3) Subclause 8.20.9

Create a new subclause 8.20.9 as defined below:

8.20.9 The C0 and C1 control functions of ISO/IEC 6429 may be used with the following exceptions:

NOTES

1 The effect of this subclause is to allow the useful control functions such as LF, CR, TAB, etc., while forbidding the use of escapes to other character sets.

2 The C0 and C1 control functions are each encoded in two octets for BMPString and four for UniversalString.

a) Announcer escape sequences defined in ISO/IEC 2022 shall not be used.

NOTE 1 – The assumed character coding environment is ISO/IEC 10646-1.

b) Designating or identifying escape sequences defined in ISO/IEC 2022 shall not be used, including the identifying escape sequences permitted by ISO/IEC 10646-1, 17.2 and 17.4.

NOTE 2 – ASN.1 allows the use of the PermittedAlphabet subtype notation to select the set of allowed characters. PermittedAlphabet is also used to select the level of implementation of ISO/IEC 10646-1. BMPString is always used for two-octet form and UniversalString for the four-octet form.

c) Invoking escape sequence or control sequences of ISO/IEC 2022 shall not be used, such as SHIFT IN (SI), SHIFT OUT (SO), or LOCKING SHIFT FOR G3 (SS3)

d) The coding shall conform to ISO/IEC 10646-1 and remain in that code set.

e) Control sequences for identifying subsets of graphic characters according to ISO/IEC 10646-1, 17.3 shall not be used.

NOTE 3 – ASN.1 applications use subtyping to indicate subsets of the graphic characters of ISO/IEC 10646-1 and to select the ISO/IEC 10646-1 cells that correspond to the control characters of ISO/IEC 6429.

f) The escape sequences of ISO/IEC 10646-1, 17.5 shall not be used to switch to ISO/IEC 2022 codes.