



INTERNATIONAL STANDARD ISO/IEC 8825-7:2015 TECHNICAL CORRIGENDUM 2

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Information technology — ASN.1 encoding rules —

Part 7: Specification of Octet Encoding Rules (OER)

TECHNICAL CORRIGENDUM 2

Technologies de l'information — Règles de codage ASN.1

Partie 7: Spécification des règles de codage des octets (OER)

RECTIFICATIF TECHNIQUE 2

Technical Corrigendum 2 to ISO/IEC 8825-7:2015 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*, in collaboration with ITU-T. The identical text is published as Rec. ITU-T Rec.X696 (2015)/Cor.1 (2017).

Technical Corrigendum 2 to ISO/IEC 8825-7:2015 cancels and replaces ISO/IEC 8825-7:2015/Cor.1:2017, which did not contain the correct document reference number.

INTERNATIONAL STANDARD
ITU-T RECOMMENDATION

Information technology – ASN.1 encoding rules: Specification of Octet Encoding Rules (OER)

Technical Corrigendum 2

Conventions used in this corrigendum: Original, unchanged, text is in normal font. Deleted text is struck-through, thus: ~~deleted text~~. Inserted text is underlined, thus: inserted text.

1 Clause 12.2

Replace clause 12.2 with the following:

If all of the following are true:

- a) the lower bound of the effective value constraint of the mantissa is greater than or equal to $-2^{24} + 1$ (-16777215) and its upper bound is less than or equal to $2^{24} - 1$ (16777215);
- b) the effective value constraint of the base is the fixed value 2; and
- c) the lower bound of the effective value constraint of the exponent is greater than or equal to ~~-323126~~ and its upper bound is less than or equal to 292127 ,

then the real value shall be encoded in the binary32 (single precision) floating-point format specified in IEEE 754.

2 Clause 12.3

Replace clause 12.3 with the following:

12.3 Otherwise, if all of the following are true:

- a) the lower bound of the effective value constraint of the mantissa is greater than or equal to $-2^{53} + 1$ (-9007199254740991) and its upper bound is less than or equal to $2^{53} - 1$ (9007199254740991);
- b) the effective value constraint of the base is the fixed value 2; and
- c) the lower bound of the effective value constraint of the exponent is greater than or equal to ~~-10741022~~ and its upper bound is less than or equal to 9714023 ,

then the real value shall be encoded in the binary64 (double precision) floating-point format specified in IEEE 754.

3 Clause 16.1

Replace clause 16.1 with:

16.1 The encoding of a sequence value shall consists of the following parts, in order:

- a) preamble;
- b) encodings of the components in the extension root;
- c) extension addition presence bitmap (optional); and
- d) encodings of the extension additions (optional).

NOTE – Each of these parts occupies a whole number of octets.

4 Clause 18.1

Replace clause 18.1 with:

18.1 The value of a set type shall be encoded as if the type had been declared a sequence type, except that the components in the "RootComponentTypeList" of the set type (as well as the preamble bits) shall be encoded in the order specified in 18.2.

5 Clause 20.1

Add Note 3 at the end of clause 20.1:

NOTE 3 – If the type of the choice alternative is an untagged choice type, the outermost tag for that alternative will appear more than once in the encoding. This is different from how BER works.