



**INTERNATIONAL STANDARD ISO/IEC 8825-7:2015**  
**TECHNICAL CORRIGENDUM 3**

Published 2018-09

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION  
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## **Information technology — ASN.1 encoding rules**

Part 7:

### **Specification of Octet Encoding Rules (OER)**

TECHNICAL CORRIGENDUM 3

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

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

*RECTIFICATIF TECHNIQUE 3*

Technical Corrigendum 3 to this document was prepared by ISO/IEC JTC 1, *Information technology, SC 6, Telecommunications and information exchange between systems*, in collaboration with ITU-T. The identical text is published as ITU-T X.696 (05/2018).



INTERNATIONAL STANDARD ISO/IEC 8825-7  
RECOMMENDATION ITU-T X.696Information technology – ASN.1 encoding rules:  
Specification of Octet Encoding Rules (OER)

## Technical Corrigendum 3

## Summary

Technical corrigendum 3 to Rec. ITU-T X.696 | ISO/IEC 8825-7 provides correction to 32-bit IEEE Real encodings.

## History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T X.696	2014-08-29	17	<a href="http://handle.itu.int/11.1002/1000/12151">11.1002/1000/12151</a>
2.0	ITU-T X.696	2015-08-13	17	<a href="http://handle.itu.int/11.1002/1000/12487">11.1002/1000/12487</a>
2.1	ITU-T X.696 (2015) Cor. 1	2017-05-14	17	<a href="http://handle.itu.int/11.1002/1000/13258">11.1002/1000/13258</a>
2.2	ITU-T X.696 (2015) Cor. 2	2017-10-14	17	<a href="http://handle.itu.int/11.1002/1000/13364">11.1002/1000/13364</a>
2.3	ITU-T X.696 (2015) Cor. 3	2018-05-14	17	<a href="http://handle.itu.int/11.1002/1000/13602">11.1002/1000/13602</a>

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\* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

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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.

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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.

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INTERNATIONAL STANDARD  
ITU-T RECOMMENDATIONInformation technology – ASN.1 encoding rules:  
Specification of Octet Encoding Rules (OER)

## Technical Corrigendum 3

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:

**12.2** 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  ~~$-149323$~~  and its upper bound is less than or equal to  $104292$ ,

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