

1	Status	Final Text
2	Date of Last Update	2018/11/10
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6	Submission Date	2018/01/25

7	Correction Number CP-1787	
8	Log Summary: Consistency of Attributes added in Standard Extended SOP Classes	
9	Name of Standard	
10	PS3.2 2018d	
11	Rationale for Correction:	
12	Pixel Padding Value in, e.g., an Encapsulated PDF Storage SOP Class has ambiguous VR (US or SS) in the absence of Pixel Representation, and no purpose in the absence of Pixel Data to which it applies.	
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14	The encoding choice of a toolkit propagating such an attribute with a value is irrelevant and does not need to be specified in the standard.	
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16	It should be made explicit that such combinations are forbidden.	
17	Correction Wording:	

Amend DICOM PS3.2 as follows (changes to existing text are bold and **underlined** for additions and **struckthrough** for removals):

### 3.11.3 Standard Extended SOP Class

A SOP Class defined in the DICOM Standard extended in an implementation with additional Type 3 Attributes. The additional Attributes may either be drawn from the Data Dictionary in ????, or may be Private Attributes. The semantics of the related Standard SOP Class shall not be modified by the additional Type 3 Attributes when absent. Therefore, the Standard Extended SOP Class utilizes the same UID as the related Standard SOP Class.

#### Note

IODs from a Standard Extended SOP Class may be freely exchanged between DICOM implementations since implementations unfamiliar with the additional Type 3 Attributes would simply ignore them.

## 7.3 Rules Governing Types of SOP Classes

Each SOP Class published in a Conformance Statement is one of four basic types. Each SOP Class in an implementation claiming conformance to the DICOM Standard shall be handled in accordance with the following rules, as dictated by the type of SOP Class.

...

Standard Extended SOP Classes shall:

- a. be a proper super set of one Standard SOP Class;
- b. not change the semantics of any Standard Attribute of that Standard SOP Class;
- c. not contain any Private Type 1, 1C, 2, or 2C Attributes, nor add additional Standard Type 1, 1C, 2 or 2C Attributes;
- d. not change any Standard Type 3 Attributes to Type 1, 1C, 2, or 2C;
- e. use the same UID as the Standard SOP Class on which it is based.

A Standard Extended SOP Class may include Standard and/or Private Type 3 Attributes beyond those defined in the IOD on which it is based as long as the Conformance Statement identifies the added Attributes and defines their relationship with the ??? information model. **If additional Type 3 Attributes drawn from the Data Dictionary in ??? are sent that affect the encoding of other Attributes, or whose encoding depends on the values of other Attributes, their presence and use shall be consistent.**

#### Note

**E.g., An Attribute such as Pixel Padding Value (0028,0120) with a dictionary VR of US or SS would not be allowed to be present without Pixel Representation (0028,0103) also being present to resolve the encoding ambiguity. Further, Pixel Padding Value would not be allowed to be present in the absence of the Pixel Data (7FE0,0010) to which it applies.**

An implementation claiming conformance with a Standard Extended SOP Class shall identify in its Conformance Statement the Standard SOP Class being extended, the options, roles, and behavior selected, and describe the Attributes being added with the Standard SOP Class's IOD Model and Modules.