

DICOM Correction Proposal Form

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Tracking Information - Administration Use Only	
Correction Proposal Number	CP 213
STATUS	Assigned
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Correction Number	CP 213
Log Summary: DX Image Storage Clarifications	
Type of Modification: Clarification	Name of Standard PS 3.4 - 2000
<p>Rationale for Correction: The DX Image Storage contains two SOP Classes one FOR PRESENTATION that is defined as a baseline and an optional SOP Class FOR PROCESSING. This raise a few questions that if the standard doesn't answer it in a clarification it can lead to different interpretation and implementation that might reside with interoperability problems among different DX Image Storage implementers. This Coupling of the FOR PROCESSING SOP Class with the FOR PRESENTATION need to be clarified such as to answer the following questions:</p> <ol style="list-style-type: none"> 1. Can an SCU negotiate for the FOR PROCESSING SOP Class without negotiating for the FOR PRESENTATION SOP Class. The answer is "yes". 2. How can the SCP check whether or not the SCU supports the baseline FOR PRESENTATION SOP class is supported when only the FOR PROCESSING SOP class is negotiated. The answer is twofold: the SCU is always required to support the baseline, and there is no way for the SCP to check this in real-time . 3. The Presentation Intent Type element (0008,0068) is redundant with the SOP Class UID. It would be a violation of the standard if the value of Presentation Intent Type was not consistent with the SOP Class UID. The redundancy is justified by the commonality of the element across three families of SOP Class: DX, Mammo and Intra-oral radiography. Removing it now would break existing implementations. 	
Sections of document affected: PS 3.4-2000 B.5.1.1	
Correction Wording: See below.	

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2 **B.5.1.1 Digital X-Ray Image Storage SOP Classes**

3 The Digital X-Ray Image Storage - For Presentation SOP Class shall use the DX IOD with an
4 Enumerated Value of FOR PRESENTATION for Presentation Intent Type (0008,0068).

5 The Digital X-Ray Image Storage - For Processing SOP Class shall use the DX IOD with an Enumerated
6 Value of FOR PROCESSING for Presentation Intent Type (0008,0068).

7 An SCU or SCP of the Digital X-Ray Image Storage - For Processing SOP Class shall also support the
8 Digital X-Ray Image Storage - For Presentation SOP Class.

9 **Notes:** 1. The intent of this requirement is to ensure a useful level of interoperability by avoiding the situation
10 where an SCU might support only the Digital X-Ray Image Storage - For Processing SOP Class and an
11 SCP only the Digital X-Ray Image Storage - For Presentation SOP Class, or vice versa. The burden is
12 therefore to support the Digital X-Ray Image Storage - For Presentation SOP Class as a "baseline".

13 2. **The term "support" is used in this section in the sense that an SCU or SCP must be capable of**
14 **sending or receiving the For Presentation SOP Class. There is no intent to imply that an SCU must**
15 **always send an instance of the For Presentation SOP Class when an instance of the For Processing**
16 **SOP Clas is sent.**

17 Nor is there any intent to imply that that during Association establishment, that a Presentation
18 Context for the For Presentation SOP Class has to be proposed by the initiator. However, an
19 association acceptor must not reject a For Presentation SOP Class Presentation Context if it
20 accepts a For Processing SOP Class Presentation Context.

21 It is not possible for an SCP to determine from proposed Presentation Contexts whether or not an
22 SCU "supports" (is capable of sending) both For Processing and For Presentation SOP Class
23 Instances. An SCU that supports both may well choose to only propose one or the other during
24 Association establishment, depending on which Instances it actually intends to send over that
25 particular association. Such a determination requires a priori knowledge of the information
26 contained in the Conformance Statement for the SCU, as well as how the SCU is configured and
27 operated.

28 The intent of the requirement is that if an SCU is only capable of sending the For Presentation SOP
29 Class, any SCP will be guaranteed to be able to receive it. Conversely, if an SCP is only capable of
30 receiving the For Presentation SOP Class, any SCU will be guaranteed to be able to send it.

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