DICOM Correction Proposal

STATUS	Letter Ballot
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Correction Number	CP-1399
Log Summary: Add Effective Wedge Angle	
Name of Standard PS 3.3 2011 PS 3.6 2011	
Rationale for Correction: The IHE-RO Technical Committee has requested to add an effective wedge angle. This was stated in the context of the Profile TPPC, which includes actor to produce and consume treatments using motorized wedges, which are partially in the beam. In this case there an effective wedge angle can be defined, which takes into account the amount of time the angle is present in the beam.	
Correction Wording:	

In Table C.8-50—RT BEAMS MODULE ATTRIBUTES, add the following attribute:

RT Beams Module

The RT Beams Module contains information defining equipment parameters for delivery of external radiation beams.

Table C.8-50—RT BEAMS MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Beam Sequence	(300A,00B0)	1	Introduces sequence of treatment beams for current RT Plan. One or more items shall be included in this sequence.
>Beam Number	(300A,00C0)	1	Identification number of the Beam. The value of Beam Number (300A,00C0) shall be unique within the RT Plan in which it is created. See Note 1.
>Beam Name	(300A,00C2)	3	User-defined name for Beam. See Note 1.
…			
>Number of Wedges	(300A,00D0)	1	Number of wedges associated with current Beam.
>Wedge Sequence	(300A,00D1)	1C	Introduces sequence of treatment wedges. Required if Number of Wedges (300A,00D0) is non-zero. One or more

			items shall be included in this sequence.
>>Wedge Number	(300A,00D2)	1	Identification number of the Wedge. The value of Wedge Number (300A,00D2) shall be unique within the Beam in which it is created.
>>Wedge Type	(300A,00D3)	2	Type of wedge (if any) defined for Beam. Defined Terms: STANDARD = standard (static) wedge DYNAMIC = moving beam limiting device (collimator) jaw simulating wedge MOTORIZED = single wedge which can be removed from beam remotely
>>Wedge ID	(300A,00D4)	3	User-supplied identifier for Wedge.
>>Accessory Code	(300A,00F9)	3	An identifier for the accessory intended to be read by a device such as a bar-code reader.
>>Wedge Angle	(300A,00D5)	2	Nominal wedge angle (degrees).
>>Wedge Factor	(300A,00D6)	2	Nominal wedge factor under machine calibration conditions at the beam energy specified by the Nominal Beam Energy (300A,0114) of the first Control Point of the Control Point Sequence (300A,0111).
>>Wedge Orientation	(300A,00D8)	2	Orientation of wedge, i.e. orientation of IEC WEDGE FILTER coordinate system with respect to IEC BEAM LIMITING DEVICE coordinate system (degrees).
>>Source to Wedge Tray Distance	(300A,00DA)	3	Radiation source to wedge tray attachment edge distance (in mm) for current wedge.
>>Effective Wedge Angle	**(xxxx,yyyy)**	**3**	**Effective wedge angle (degrees).** **See C.8.8.16.**
>Number of Compensators	(300A,00E0)	1	Number of compensators associated with current Beam.
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C.8.8.16 Effective Wedge Angle

The Effective Wedge Angle describes the dosimetric angle of a motorized wedge accounting for the partial presence of the wedge in the beam. The presence of the wedge in the beam is specified by the Wedge Position (300A,0118) in the Wedge Position Sequence (300A,0116) included in the Control Point Sequence (300A,0111) of the current beam. When the wedge is in the beam throughout all control points, the Effective Wedge Angle will have the same value as the Wedge Angle (300A,00D5). Otherwise the Effective Wedge Angle will have a lower value than the Wedge Angle.

Modify 3.6: Add the following data element to the data dictionary:

(xxxx,yyyy)	**Effective Wedge Angle**	**EffectiveWedgeAngle**	**DS**	**1**