

DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2011/08/15
Person Assigned	Ulrich Busch (ulrich.busch@varian.com)
Submitter Name	Johannes Stahl (johannes.stahl@siemens.com)
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Correction Number	CP-1116
Log Summary: RT Image Higher Precision Current and Time	
Name of Standard	PS 3 2011
Rationale for Correction	<p>In RT Image, the X-Ray tube current (0018,1151) and the Exposure time (0018,1150) are encoded with a VR of IS (Integer String) and units of mA and msec, respectively.</p> <p>However, for cone beam imaging applications, the doses applied to individual frames can be very low, so that these values have insufficient precision. In particular, it is possible that the applied exposure in mAs cannot be accurately calculated from the tube current and the exposure time.</p> <p>For these cases it is proposed to add three additional parameters to the Exposure sequence, which have already been defined in the data dictionary for other modalities.</p>
Correction Wording:	

In PS 3.3, add the following attributes in Section C.8.8.2 (RT Image Module)

Exposure Sequence	(3002,0030)	3	Introduces sequence of Exposure parameter sets, corresponding to exposures used in generating the image. One or more items may be included in this sequence. See C.8.8.2.4.
>Exposure Time	(0008,1150)	2C	Time of X-Ray exposure (msec). Required if Value 3 of Image Type (0008,0008) is SIMULATOR or RADIOGRAPH.
>X-Ray Tube Current in mA	<u>(0018,9330)</u>	<u>3</u>	<u>X-Ray Tube Current in mA. An average in the case of fluoroscopy (continuous radiation mode).</u>
>Exposure Time in ms	<u>(0018,9328)</u>	<u>3</u>	<u>Duration of X-Ray exposure in msec.</u>