DICOM Correction Item

Correction Number CP-1082	
Log Summary: Add term for IEEE 1588 Precision Time Protocol	
Type of Modification Addition	Name of Standard PS 3.3-2009

Rationale for Correction:

From Wikipedia:

> The Precision Time Protocol (PTP) is a high precision time synchronization protocol for networked measurement and control systems. Accuracy in the sub-microsecond range may be achieved with low-cost implementations.[1] It is defined in the IEEE 1588-2002 and 1588-2008 standards, officially entitled "Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems".
>
> "IEEE 1588 is designed to fill a niche not well served by either of the two dominant protocols, NTP and GPS. IEEE 1588 is designed for local systems requiring very high accuracies beyond those attainable using NTP. It is also designed for applications that cannot bear the cost of a GPS receiver at each node, or for which GPS signals are inaccessible."[2]

Sections of documents affected

PS 3.3 Annex C.7.4.2

Correction Wording:

Add a reference to section 2, Normative References

IEEE 1588 1588-2008 IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems

Modify table C.7-7

Table C.7-7
Synchronization Module Attributes

Attribute Name	Tag	Type	Attribute Description
…			
Time Distribution Protocol	(0018,1802)	3	Method of time distribution used to synchronize this equipment. Defined Terms: NTP - Network Time Protocol IRIG - InterRange Instrumentation Group GPS - Global Positioning System SNTP - Simple Network Time Protocol **PTP - IEEE 1588 Precision Time Protocol**
NTP Source Address	(0018,1803)	3	IP Address of NTP**, SNTP, or PTP** time source. IPv4 addresses shall be in dotted decimal (e.g. 192.168.1.1). The IPv6 addresses shall be in colon

			separated hexadecimal (e.g. 12:34:56:78:9a:bc:de:f0). Note: Identity of this value in two instances acquired contemporaneously implies a common time base. The NTP Source Address ~~**may**~~ **might** not persist over time.