DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2018/11/07
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Submission Date	2018/03/22

Correction Number	CP-1810
Log Summary: Make the sections on o	lefinitions consistent and complete

Name of Standard

PS3.1-PS3.21

Rationale For Correction

- Some parts of the Standard use definitions that are defined in other parts, without having mentioned where these terms have been defined. For instance, PS3.4 uses Standard Extended SOP Class, while this is not mentioned in section 3.7 (as it should, as this term is defined in PS3.2).
- Reference to 'part' and 'standard' is not done consistently. For instance, PS3.6 and PS3.7 write 'part' and 'standard' (in section 3 at least), while for instance PS3.2 and PS3.6 write 'Part' and 'Standard' (in section 3). Proposal is to write these terms with capitals. This makes the word Part different from the word part (which is also used in other ways in the Standard). The same for Standard and standard.
- Now that Part is a term, we need to add it to the definitions in PS3.1 (and refer to the ISO directives for that). Furthermore, Conformance Statement needs to be removed from the definitions in PS3.1, as it is defined in PS3.2; a reference needs to be made. Or, if PS3.1 needs to stay independent of the other parts, remove this definition from PS3.2, and make a reference there. Take the same approach for all terms in PS3.1.
- The definition of terms is not done in the same way across the parts. For instance, PS3.2 defines terms in subsections (sections 3.11.*) while PS3.4 defines terms in a list with bold items (section 3.9), and PS3.1 and PS3.6 gives its defined term as is done in the section Symbols and Abbreviations. Proposal is to have definitions like subsections, which make referencing them easier.
- It would be great to have all the definitions (those in all sections 3) hyperlinked, so that e.g. clicking on Standard SOP Class in section 3.7 of PS3.4 will bring you to section 3.11.2 of PS3.2. Currently, finding the definition of a term involves too much effort for the user of the Standard. Even better (for the users) would be that hovering over such a reused term gives the proper definition instead of the source.

Correction Wording:

Item #1: Changes in PS3.4, section 3.7 — Definitions complete

3.7 DICOM Conformance

This Part of the Standard makes use of the following terms defined in PS3.2:

- a) Conformance StatementStandard SOP Class
- b) StandardSpecialized SOP Class
- c) Specialized SOP ClassConformance Statement
- d) Standard Extended SOP Class
- e) Private SOP Class

f) Standard Attribute

g) Private Attribute

Item #2: Changes in PS3.1-PS3.21 — Capitalize Part and Standard (where appropriate)

Change 'part' to 'Part' where appropriate, namely when one of the 21 Parts of the DICOM Standard is meant:

- PS3.1: 3 of the 5 occurrences
- PS3.2: none
- PS3.3: several of the 170
- PS3.4: some of the 26.
- PS3.5: several of the 32.
- PS3.6: etc
- •

Change 'standard' to 'Standard' where appropriate, namely when the DICOM Standard is meant:

- PS3.1: some of the 15 occurrences
- PS3.2: some of the 49
- PS3.3: several of the 118
- PS3.4: several of the 54
- PS3.5: several of the 128
- PS3.6: several of the 12
- ...

Item #3: Changes in PS3.1, section 3 — Add Part and improve Conformance Statement

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Conformance Statement

A formal statement that describes a specific **product** implementation **that uses<u>of</u>** the DICOM Standard. It specifies the Service Classes, Information Objects, **and** Communication Protocols. **Security Profiles**, **and Media Storage Application Profiles** supported by the implementation.

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Message

A data unit of the Message Exchange Protocol exchanged between two cooperating DICOM Applications. A Message is composed of a Command Stream followed by an optional Data Stream.

Part

<u>Portion of the DICOM Standard that belongs together and is published as a separate</u> document.

Service Class

A structured description of a service that is supported by cooperating DICOM Applications using specific DICOM Commands acting on a specific class of Information Object.

Item #4: Changes in PS3.2, section 3 — Remove Conformance Statement from PS3.2 and refer to PS3.1

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3.4 DICOM Introduction and Overview Definitions

This Part makes use of the following terms defined in PS3.1:

- a. Conformance Statement
- b. Information Object

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3.11.1 Conformance Statement

A formal statement associated with a specific implementation of the DICOM Standard. It specifies the Service Classes, Information Objects, Communications Protocols and Media Storage Application Profiles supported by the implementation. See PS3.1 for formal definition.

Item #5: Changes in PS3.* – Align, across Parts, the way definitions are given

Change the format of new definitions in a Part to mimic that of PS3.2. This requires updates according to the following table:

Part and section	Current format	New format	Requires update
PS3.1, section 3	Term with indented description	Term as subsection	Yes
PS3.2, section 3.11	Term as subsection	As before	No
PS3.3, sections 3.8, 3.11, 3.17, 3.19, and 3.20	Term with indented description	Term as subsection	Yes
PS3.4, section 3.9	Bold term before description	Term as subsection	Yes
PS3.5, section 3.10	Bold term before description	Term as subsection	Yes
PS3.6, section 3.4	Term with indented description	Term as subsection	Yes
PS3.7, section 3.10	Bold term before description	Term as subsection	Yes
PS3.8, section 3.7	Bold term before description	Term as subsection	Yes
PS3.10, section 3.8	Term with indented description	Term as subsection	Yes
PS3.11, section 3.8	Term with indented description	Term as subsection	Yes
PS3.12, section 3.2	Term as subsection	As before	No
PS3.14, section 3.1	Term with indented description	Term as subsection	Yes
PS3.15, section 3.10	Term with indented description	Term as subsection	Yes

Part and section	Current format	New format	Requires update
PS3.16, section 3.1	Term with indented description	Term as subsection	Yes
PS3.17, section 3	None	Term as subsection	No
PS3.18, section 4	Term with indented description	Term as subsection	Yes
PS3.19, section 3.7	Term with indented description	Term as subsection	Yes
PS3.20, section 3.1-3.4	Term with indented description	Term as subsection	Yes
PS3.21, section 3.1	Term with indented description	Term as subsection	Yes

Item #6: Changes in PS3.* – Align, across Parts, the way definitions are referred to

Change the format of referral to definitions in a Part to mimic that of PS3.2. This requires updates according to the following table:

Part and section	Current format	New format	Requires update
PS3.1, section 3	None	As before	No
PS3.2, sections 3.1-3.10	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No
PS3.3, sections 3.1-3.7, 3.9-3.10, 3.12-3.16, 3.18	Introduction sentence with hyperlinked reference to origin and terms with indented reference to origin. ("See PS3.1."); no definition.	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	Yes
PS3.4, section 3.1-3.8	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No
PS3.5, section 3.1-3.9, 3.11	Introduction sentence with hyperlinked reference to origin and terms as items "a)", "b)",; no definition.	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	Yes
PS3.6, section 3.1-3.3	Introduction sentence with hyperlinked reference to origin and terms with indented reference to origin. ("See PS3.1."); no definition.	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	Yes
PS3.7, section 3.1-3.9	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No

Part and section	Current format	New format	Requires update
PS3.8, section 3.1-3.6	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No
PS3.10, section 3.1-3.7	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No
PS3.11, section 3.1-3.7	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No
PS3.12, section 3.1	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No
PS3.14, section 3	None	As before	No
PS3.15, section 3.1-3.9	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	As before	No
PS3.16, section 3.2	Introduction sentence with hyperlinked reference to origin and terms with indented reference to origin. ("See PS3.1."); no definition.	Introduction sentence with hyperlinked reference to origin and terms as items "a.", "b.",; no definition.	Yes
PS3.17, section 3	None	As before	No
PS3.18, section 4	None	As before	No
PS3.19, section 3.1-3.6	Introduction sentence with hyperlinked reference to origin and terms with indented reference to origin. ("See PS3.1."); no definition.	As before	No
PS3.20, section 3.1-3.4	None	As before	No
PS3.21, section 3	None	As before	No

Item #7: Changes in PS3.* – Make terms hyperlinked to definition

For all terms in Item #6, make this a hyperlink to the origin. When the term has been defined in an external document, the hyperlink should point to that document. When the term has been defined in another Part of the DICOM Standard it should point to that definition; note that this requires the creation of quite a lot of anchor points.