

DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2013/06/13
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Correction Number	CP-1267
Log Summary: Video streams are independent and may not span instances	
Name of Standard PS 3.5 2011	
Rationale for Correction: Videos to be encoded in DICOM may be too large for one instance and may need to be split, but each instance must be independent and playable without dependence on other (previous) instances. Further, the manner in which such separate instances are related is not specified in the standard, but a note is added to suggest that mechanisms such as grouping into the same Series, and references to earlier instances using Referenced Image Sequence may be used	
Correction Wording:	

Amend PS 3.05:

8.2.5 MPEG2 MP@ML IMAGE COMPRESSION

...

One fragment shall contain the whole **MPEG2** stream.

- Notes:
1. If a video stream exceeds the maximum length of one fragment, it may be sent as multiple SOP Instances, **but each SOP Instance will contain an independent and playable bit stream, and not depend on the encoded bit stream in other (previous) instances. The manner in which such separate instances are related is not specified in the standard, but mechanisms such as grouping into the same Series, and references to earlier instances using Referenced Image Sequence may be used.**
 2. This constraint limits the length of the compressed bit stream to no longer than $2^{32}-2$ bytes.

8.2.6 MPEG2 MP@HL IMAGE COMPRESSION

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One fragment shall contain the whole MPEG2 bit stream.

- Notes:
1. If a video stream exceeds the maximum length of one fragment (approximately 4 GB), it may be sent as multiple SOP Instances, **but each SOP Instance will contain an independent and playable bit stream, and not depend on the encoded bit stream in other (previous) instances. The manner in which such separate instances are related is not specified in the standard, but mechanisms such as grouping into the same Series, and references to earlier instances using Referenced Image Sequence may be used.**
 2. This constraint limits the length of the compressed bit stream to no longer than $2^{32}-2$ bytes.

8.2.7 MPEG-4 AVC/H.264 High Profile / Level 4.1 Video Compression

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One fragment shall contain the whole MPEG-4 AVC/H.264 bit stream.

Note: If a video stream exceeds the maximum length of one fragment (approximately 4 GB), it may be sent as multiple SOP Instances, **but each SOP Instance will contain an independent and playable bit stream, and not depend on the encoded bit stream in other (previous) instances. The manner in which such separate instances are related is not specified in the standard, but mechanisms such as grouping into the same Series, and references to earlier instances using Referenced Image Sequence may be used.**