DICOM Correction Proposal

<table>
<thead>
<tr>
<th>STATUS</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Last Update</td>
<td>2018/03/13</td>
</tr>
<tr>
<td>Person Assigned</td>
<td>Wim Corbijn</td>
</tr>
<tr>
<td>Submitter Name</td>
<td>Wim Corbijn</td>
</tr>
<tr>
<td>Submission Date</td>
<td>2018/01/05</td>
</tr>
</tbody>
</table>

Correction Number CP-1781

Log Summary: Clarify number of asynchronous associations

Name of Standard PS3.7

Rationale For Correction:
We encountered systems that don't support asynchronous communication and have in the DCS for this "maximum number of outstanding asynchronous transactions" to be 1. Even in the association the Asynchronous Operations (And Sub-Operations) Window Negotiation being present with value 1. Presence of the extra information leads to problems, what does 1 asynchronous association connection mean?
Clarification on what a number means would help to get this out.
If you have 1 does this mean effectively no asynchronous behavior or can I have 2 transactions of which 1 is outstanding.

Correction Wording:

Item #1: Amend PS3.7 D3.3.3 Asynchronous Operations (And Sub-Operations) Window Negotiation to clarify a value of 1.

D.3.3.3 Asynchronous Operations (And Sub-Operations) Window Negotiation

The Asynchronous Operations Window is used to negotiate the maximum number of outstanding operation or sub-operation requests (i.e., command requests) for each direction. The synchronous operations mode is the default mode and shall be support by all DICOM AEs. This negotiation is optional.

The Association-requester conveys in the A-ASSOCIATE request:

• when negotiating the SCU role for operations, the maximum number of outstanding operations it may invoke asynchronously; when negotiating the SCP role for operations, the maximum number of outstanding sub-operations it may invoke asynchronously; when negotiating the SCP role for notifications, the maximum number of notifications it may invoke asynchronously

• when negotiating the SCP role for operations, the maximum number of outstanding operations it may invoke asynchronously; when negotiating the SCU role for operations, the maximum number of outstanding sub-operations it may perform asynchronously; when negotiating the SCU role for notifications, the maximum number of notifications it may perform asynchronously when negotiating the SCP role

A value of zero indicates that the above parameters are unlimited. A value of one indicates that there is no Asynchronous Operations support. If the Asynchronous Operations Window is absent the default for the above parameters shall be equal to one.

The Association-acceptor conveys in the A-ASSOCIATE response:
• when negotiating the SCP role for operations, the maximum number of outstanding operations; when negotiating the SCU role for operations, the maximum number of sub-operations it allows the Association-requester to invoke asynchronously; when negotiating the SCU role for notifications, the maximum number of outstanding notifications it allows the Association-requester to invoke asynchronously when negotiating the SCU role. This number shall be equal or less than the number of outstanding notifications, operations and/or sub-operations the Association-requester offers to invoke (by the A-ASSOCIATE indication).

• when negotiating the SCU role for operations, the maximum number of outstanding operations; when negotiating the SCP role for operations, the maximum number of sub-operations it allows the Association-requester to perform asynchronously; when negotiating the SCP role for notifications, the maximum number of outstanding notifications, the maximum number of outstanding operations and sub-operations it allows the Association-requester to perform asynchronously. This number shall be equal or less than the number of outstanding notifications, operations and/or sub-operations the Association-requester offers to perform (by the A-ASSOCIATE indication).

A value of zero indicates that the above parameters are unlimited. **A value of one indicates that there is no Asynchronous Operations support.** If the Asynchronous Operations Window is absent the default for the above parameters shall be equal to one. Figures D.3-5 and D.3-6 illustrate examples of Asynchronous Operations Window negotiation.