# DICOM Change Proposal

| | |
|---|---|
| STATUS | Nov 2026 Voting Packet |
| Date of Last Update | 2026/09/13 |
| Person Assigned | Clunie |
| Submitter Name | Pedro Gimeno Fortea <p.gimeno@4dmedica.com> |
| Submission Date | 2026/02/01 |

| |
|---|
| Change Number CP-2627 |
| Log Summary: Explain behavior for response to unrecognized extended negotiation items |
| Name of Standard<br>PS3.7 |
| Rationale for Change:<br>The Extended Negotiation mechanism defined in PS3.7 and used in several sections of PS3.4 has been extended several times. Without explicit directives on what to do with unknown values, applications may make the wrong choice with regards to supporting future versions of the standard.<br>For example, an Association Acceptor supporting the Query/Retrieve Service Class of the 2014a version of the Standard will know what to do with bytes 1-5 for a C-FIND Query/Retrieve Service Class, but if it is contacted by an Association Requester that supports the 2025d version of the Standard, which sends 7 bytes instead of 5, the Association Acceptor might not explicitly truncate the input prior to negotiating and sending the response.<br>The only future-proof way of handling this case for the 2014a Acceptor would be to never send more than 5 bytes, and for the 2025d Requester to handle missing values as having rejected the feature requested.<br>However, currently the Standard does not explicitly specify that Acceptors should limit the length of their response to what they recognize, nor that Requesters should treat missing values as if they had not been accepted. |
| Change Wording: |

***Modify PS3.7 Section D.3.3.5 "Service-Object Pair (SOP) Class Extended Negotiation":***

…

If the SOP Class Extended Negotiation Sub-Items do not exist in the A-ASSOCIATE indication they shall be omitted in the A-ASSOCIATE response.

**If SOP Class Extended Negotiation Sub-Items exist in the A-ASSOCIATE indication but are not recognized by the Association-accepter, the Association-accepter shall omit the corresponding Extended Negotiation Sub-Items in the A-ASSOCIATE response.**

**If SOP Class Extended Negotiation Sub-Items exist in the A-ASSOCIATE indication and are longer than expected by the Association-accepter, the Association-accepter shall omit the unrecognized bytes from the corresponding Extended Negotiation Sub-Items in the A-ASSOCIATE response.**

**If SOP Class Extended Negotiation Sub-Items exist in the A-ASSOCIATE indication but are omitted in the A-ASSOCIATE response, or shorter than expected, the Association-requestor shall interpret the response as having rejected the specific feature described by the Extended Negotiation request or the omitted parts of the Extended Negotiation Sub-Items.**

**Note.**

**The Standard is extended from time to time to allow new features described by extended negotiation. The requirements in this Section allow Association-requestors implementing new extended negotiation Sub-Items, or longer negotiation Sub-Items, in the A-ASSOCIATE indication, to interoperate with older Association-acceptors unaware of the new extended negotiation Sub-Items or parts of the new extended negotiation Sub-Items, and so are unable to return them partially or completely, in the A-ASSOCIATE response.**

***Modify PS3.7 Section D.3.3.5.2 "SOP Class Extended Negotiation Sub-Item Structure (A-ASSOCIATE-AC)":***

The SOP Class Extended Negotiation Sub-Item shall be made of a sequence of mandatory fields followed by the Service-class-application-information field (specific for each Service Class specification). This Sub-Item is required per the specific Service Class specifications. Multiple SOP Class Extended Negotiation Sub-Items may be present in the User Data Item of the A-ASSOCIATE-AC, however, only one Sub-Item per SOP Class UID shall be present. Table D.3-11 shows the sequence of mandatory fields.

**If the Service-class-application-information field is shorter than the Association-requestor expects, the Association-requestor shall interpret the missing information in the response as the Association-accepter having rejected the corresponding specific Extended Negotiation features that were requested.**

**Note.**

**The Standard is extended from time to time to allow new features described by extended negotiation, and this requirement allows Association-requestors implementing new or longer extended negotiation Sub-Items in the A-ASSOCIATE indication to interoperate with old Association-acceptors unaware of the new extended or longer negotiation Sub-Items, and so are unable to return them partially or completely, in the A-ASSOCIATE response.**